THE BUILDER
A JOURNAL FOR THE ARCHITECT & CONSTRUCTOR

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"Axholme," Noctorum, Cheshire: Garden Front.

MR. GILBERT FRASER, F.R.I.B.A., Architect.

(*See page* 178.)

MEETINGS

FRIDAY, *January* 22.

Institution of Structural Engineers (*Midland Counties Branch*). Mr. T. C. Grisenthwaite on "Steel Highway Bridges." At Birmingham. 6.30 p.m.

SATURDAY, *January* 23.

Institution of Structural Engineers (*Midland Counties Branch*). Annual Dinner. At the Midland Hotel, Birmingham.

MONDAY, *January* 25.

Architectural Association. "A Layman's Evening." 8 p.m.

TUESDAY, *January* 26.

Royal Society of Arts. Major J. R. Cosgrove on "Empire Timbers." 4.30 p.m.

National Federation of Building Trade Employers. Annual Dinner. At the Hotel Victoria, W.C.2. 7.15 p.m.

Camberwell Public Lectures. Mr. A. J. Mason on "English Church Architecture." At the South London Art Gallery, S.E.

University College Lectures. Miss E. Jeffries Davis on "Descriptions of London, *circa* 1175-1830." 8.15 p.m.

Institution of Civil Engineers. Discussion on "Calcutta Port Extensions," and "Construction and Sinking of Monoliths at King George's Dock, Calcutta." 6 p.m.

WEDNESDAY, *January* 27.

Royal Society of Arts. Mr. N. Heaton on "The Permanence of Artists' Materials." 8 p.m.

British Wood Preserving Association. Mr. K. St. G. Cartwright on "Diseases of Timber." At 29, Lincoln's Inn Fields, W.C.2. 5 p.m.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "English Renaissance, 1500-1900." 6 p.m.

THURSDAY, *January* 28.

Institution of Structural Engineers. Mr. F. E. Drury on "The Effect of Existing Building Regulations on Pillar Design." 6.30 p.m.

Society of Antiquaries. Miss Winifred Lamb on "Excavations at Thermi in Lesbos." 8.30 p.m.

FRIDAY, *January* 29.

Institution of Municipal and County Engineers. Meeting of the Metropolitan District. At 84, Eccleston-square, S.W.1. 6.30 p.m.

Incorporated Association of Architects and Surveyors. Mr. L. Maddock on "Housing Acts, 1928-1930." 7 p.m.

SATURDAY, *January* 30.

Institution of Mechanical Engineers. Conversazione.

MONDAY, *February* 1.

Royal Institute of British Architects. Sir Harold Brakspear on "St. George's Chapel, Windsor." 8 p.m.

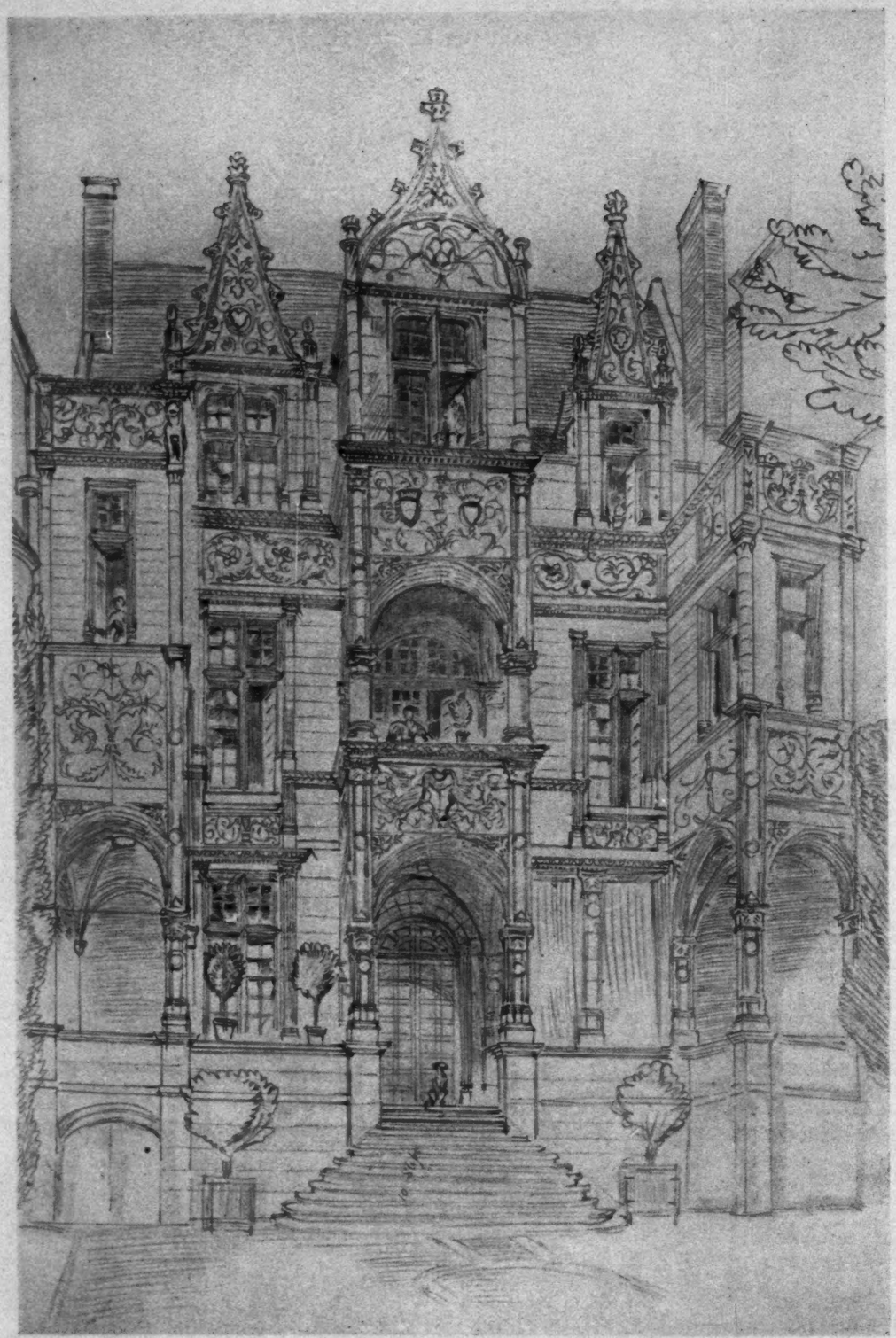
Institute of Fuel. Presentation of the Melchett Medal by the President, Sir Hugo Hirst. At the Institution of Electrical Engineers, Savoy-place, W.C.2. 6.30 p.m.

TUESDAY, *February* 2.

Hampshire and Isle of Wight Architectural Association. Annual Dinner. At Southampton.

WEDNESDAY, *February* 3.

Royal Society of Arts. Mr. A. B. Edge on "Geophysical Methods of Prospecting." 8 p.m.



Tours: Hotel Gouin.

From a pencil sketch by the late W. R. LETHABY.

ECONOMY AND THE BUILDING INDUSTRY

In our last issue we considered some of the results of the action of public bodies and private persons in abandoning or postponing, in the interests of national economy, building and constructional works of a remunerative and necessary character. We showed the effect of this policy and what it inevitably meant to a great and hitherto comparatively flourishing industry; unemployment for large numbers of professional men as well as craftsmen and operatives, at a cost in money which will go a long way to offset any gain or economy, and must indirectly affect the public generally. We pointed out that the architectural profession and the building industry are as anxious as any section of the community to make their contribution of sacrifice and service in the hour of need, but that they are entitled to some explanation as to the wisdom and need for the drastic economy acts of the public authorities so far as building projects are concerned.

We are glad to state that the suggestion we made that a case be prepared to put before the Minister of Health has been very warmly received by our readers, but that what appears to be needed now is a lead in furtherance of this suggestion from the great organisations representing the architectural profession and the building industry, *i.e.*, the Royal Institute of British Architects, the National Federation of Building Trade Employers, the National Federation of Building Trade Operatives, the Chartered Surveyors' Institution, and the Building Materials Manufacturers and Suppliers, and we understand that arrangements have been made for a deputation to the Ministry on the 4th prox. We cannot doubt that this deputation will speak with one voice, and it should convince the Ministry of the need for a strong recommendation to the local authorities to interpret the economy cry in the way the Prime Minister himself did in the House of Commons when he said he hoped that that cry would not be made the occasion for a "stunt" and that "cutting down for the sake of cutting down, especially at this moment," would be the greatest disservice that people could do to the nation.

We all know and lament the stagnation in most of the great industries of the country, but their plight is due in large measure to world causes which we are powerless to control. The call of the Government for national economy cannot drastically add to their difficulties at the present time, whereas that call, misinterpreted or unwisely interpreted, can do and is doing immense harm, so it appears, not only to a great and comparatively flourishing industry whose achievements and record since the War stand so high in the industrial world, but to the whole community, who must be affected in turn by the enforced inactivity and consequential increase of unemployment in that industry. The call for economy interpreted as it has been and is being interpreted by the local authorities can surely have no other effect than to overwhelm the building industry and reduce it to the unfortunate position of the other great industries of the country, and the matter is therefore of paramount importance to a large number of people directly and indirectly concerned.

The opinion of Sir Edwin Lutyens, R.A., is given on p. 173. We know we voice the views of practically the whole of the industry in urging a reversal of this policy and, in view of the Prime Minister's statement, in wondering whether there was ever the slightest constructive reasons for it. The industry was never consulted, and the decrees and edicts against its trade have been issued without any adequate thought as to their devastating consequences, in spite of the fact that there is a means at the disposal of the Legislature for consultation with the industry, which should be used at the earliest possible moment. The Building Industry Council of Review, as we understand it, was instituted for this very purpose, and it is ready to act on behalf of the industry. Why should the Government have passed over the great experience and abilities of such personalities as Lord Amulree, Sir Tudor Walters, Sir J. Walker Smith, Mr. Sydney Tatchell, Mr. T. Barron, Mr. George M. Burt, Mr. R. Coppock, Mr. Walter Meakin, and others who may be considered the most representative group of any industry in the country. It can only be inferred that if such representative opinion had been consulted, nothing like the drastic and destructive steps that have been taken in the name of "economy" would ever have been taken, for common-sense and industrial ability would have prevailed.

The industry surely has justification for claiming its right to be consulted in the formation of future Government industrial programmes affecting the interests of its own trade. No administration can hope to maintain the confidence of the country, nor would it deserve to do so, that does not follow a constructive course, difficult and involved as it may well be, and that does not avoid the easier and more destructive course that has, unfortunately, been and is being adopted at such cost, to the detriment of a great industry, representing so many arts and crafts and so many diversified interests.

The post-war building activity in London and elsewhere, and the fact that the economy zeal of many public authorities and private individuals is not, so far, so apparent in certain more or less favoured parts of the country, must not be misunderstood, nor must we conclude that the conditions, bad as they are in London, are no worse in the provinces. Though the conditions are bad in London, and are likely to become worse as a result of the stringency of money, they are more difficult, we understand, in other parts of the country, and we are afraid there are hard times ahead, which it is the duty of all, individually or collectively, to ameliorate as far as possible.

Nor must we forget that in order to pull through, as we assuredly shall, the industry may have to reorganise and show more provision and adaptability to the changed conditions in building methods. "It has been estimated," we were told recently, "that forty millions is wasted annually in this country through slack and out-of-date methods of building. We do not move with the times nor take advantage of new inventions which make for speedier building. There have been more new discoveries made during the last thirty years in the building world than in the previous two thousand, but do we in Great Britain profit by them? When a building is carcassed for gas, electric light, water, etc., we still cut the channels after the walls are completed, instead of planning the piping scheme before construction commences and leaving the channels necessary. What is the result? About 30 per cent. added to the cost of bricklaying for cutting out and making good. Again, greater advantage should be taken of the research that has been made into problems of plumbing, what are the best types of piping and joints, and how labour on the site can be reduced while increasing efficiency of performance. . . . Building costs to-day are far too high, and anything that will tend to reduce them will have the effect of encouraging people to build, thus providing additional work. Prices must come down, and this crisis, severe though it is, will have one beneficial effect and not on the building industry alone. It will make the whole nation realise that its every industry must be organised to a much higher degree with a view to cutting out unnecessary costs and unnecessary processes."

Like all great associated activities, the proper functioning of the building industry is a very complex matter, which can be easily affected, and for this reason those who have anything to do with its destinies have a real responsibility in the matter—responsibility which calls urgently for action on their part, and it is for this reason we make no apologies for returning to the subject once more.

NOTES

The President's Address to Students.

The interesting and stimulating address by the President of the R.I.B.A. to the students directs them very clearly to the two-fold aspect of their work, the practical and artistic. Whilst, however, he points out the mechanisation which characterises our time, and whilst we live in an age much dominated by mechanism, we must go through with it as children with the measles. But whatever style of building may be evolved to meet it, he begs the student to preserve the certain conviction that art is somehow dependent on men's joy in their work, and that no style of architecture is likely to be truly noble or long-abiding which ignores the part that the people must play in it, which denies all share in the joy of creation to workmen. The inspiring words of Ruskin would seem to create little influence in a world where the chief work of the architect is only to make plans and control masses of building and where the art of the craftsman appears to be of less and less account. In any words of encouragement to students, however, we are little inclined to lead their ambition in the direction of what is called monetary success. Therefore those who look upon the foundation value of the architect's work as that of the artist can look upon the words of Dr. Unwin as the right sort of inspiration. Here are his words:—"Let me say this for your encouragement. I notice few ways of making a living which offer a better life than the career you have adopted. With that good life you had better be content, for having that you have your share and can afford to leave wealth and much else to those who have nothing more interesting to pursue."

A City's Attraction.

The novelty of floodlighting buildings has certainly been an attraction to the public, but it can hardly be said that this floodlighting does more than present a novel sort of peep-show for the public. That it produces some startling and somewhat dramatic effects cannot be denied, but to most of us who value the beauty of our streets and buildings, it makes little or no artistic appeal. We sympathise fully with the opposition to the floodlighting in Edinburgh which has been voiced by Sir Geo. Washington Browne and other enlightened citizens who see no reason why periodical or continuous exhibitions of floodlighting should be held, partly on the curious plea of advertising Edinburgh. Surely, says one, there can be no necessity to turn the grand old castle into a tawdry pantomime to make visitors prolong their visits or want to come again. If at bottom of this reason for a spectacular street display is the desire to attract money to Edinburgh, we should rather credit it to some misguided folk and not to the general characteristic outlook of one of the most public-spirited and enlightened municipalities in the world. In fact, the whole movement is a subject for mingled pathos and indignation.

French Art.

In his lecture on French art at the Royal Academy, Sir Reginald Blomfield claimed that the proud position it held was something which could not be shown at the Royal Academy, for it included the splendid cathedrals of the North, the chateaux of the Loire of the sixteenth century, the stately houses of the seventeenth century with their admirable gardens and sculpture, and the consummate technique of the great French architects of the eighteenth century; and on these its claim for supremacy should be based.

The Lesson of French Art.

The lesson of French art is thus recalled by Sir Reginald: "The lesson of the work of Ange Jacques Gabriel, typical of French architecture at its best, is that architecture is the art of form, of rhythm, and proportion—in short, of ordered building. Never is the lesson more badly needed than now when Western architecture seems to be waking out of its hundred years' sleep, still rubbing its eyes and still uncertain what road to take."

Building Science.

"In the difficult times coming, it will be a case of the survival of the fittest, and the fittest will be those architects, surveyors, and builders who apply the scientific methods now available to the reduction of costs . . . ." This, the opinion of an architect published in our last issue, gives us the opportunity of drawing further attention to the valuable Building Science Abstracts published month by month by the Department of Scientific and Industrial Research. As is well known, the abstracts represent the substance of practically every important contribution to the literature of building throughout the world. The abstracts contain, of course, summaries of the reports, bulletins, and technical papers published officially or in the technical Press of British and foreign origin, as well as of the proceedings and transactions of such societies as the American Concrete Institute, American Society for Testing Materials, German Concrete Association, Ceramic Society, etc.

Features in 1931.

Among the features of particular interest dealt with during 1931 may be mentioned the abstracts of all relevant papers included in the "First Communications of the New International Association for the Testing of Materials," and of papers presented at the first International Congress, 1931, of that body, which, in abstract form, include contributions to the knowledge of cement, concrete, metal, stone, organic materials, testing and testing apparatus; particular mention may be made of the abstracts, in the November issue, of papers presented in the First Report of the Steel Structures Research Committee of the Department of Scientific and Industrial Research, published in November last. Among many abstracts dealing with the ever-present problem of damp-proof construction, mention must be made of No. 1719, which deals with

Thames House, Millbank, from Lambeth.

an important report on an extensive investigation of brick wall construction carried out by the Mellon Institute of Industrial Research, U.S.A. In general it may be said that the field covered by the abstracts is very wide and contains material of important interest not only to the scientist but to every manufacturer of building materials, the architect, the engineer, the builder, the house owner and user, and constitute a most valuable means of keeping in touch with modern practice. We learn that it has become necessary provisionally to make a small increase to 1s. for single copies, post free 1s. 1d., and 13s. per year, post free, obtainable from any of the H.M. Stationery Offices, at Kingsway, W.C.2, or elsewhere.

Telephone Services. As a guide to the more economical methods of providing telephonic communication in new buildings, we must welcome the book which has just been published by the General Post Office in consultation and with the assistance of the Royal Institute of British Architects. It seems sufficiently obvious that where telephonic communication is to be installed, some reasonable foresight and provision for it should be preliminary considerations of the architect and builder. It would be only necessary for an architect to read through the preliminary remarks in this volume to realise the importance of anticipating the wants of a telephone service. The diagrams and descriptions so clearly set out will well repay the architect's attention.

Safety in Factories. The fact that, in 1930, 899 persons were killed and 143,859 were injured by accidents in places coming within the scope of the Factory Acts, and that these accidents were estimated to cost—in administrative, medical, legal and compensative expenses—about £9,000,000, is an intimation that this is a toll which industry can ill afford. It is now coming to be recognised that the problem of accident prevention can never be solved by mere extension of the statutory regulations, but that adequate safety organisation within the industry and within the individual factory, in which both employer and worker must take their part, is necessary to secure any substantial reduction in the annual total. A booklet has been published by the Home Office, "Safety Organisation in Factories" (H.M. Stationery Offices, 3d. net), to supply information as to the essential features of a safety organisation, its constitution, and the nature of its function. Every organiser of labour should find this of great value.

Unusual Decorations. Mr. Gilbert Bayes has provided the design for unusual decorations in the back yards of St. Christopher's flats, St. Pancras. A court-yard takes the place of the old back yards, and is used for the drying of washing. The architect of the flats, Mr. Ian B. M. Hamilton, points out that washing has been a favourite subject for painters although it is usually regarded as a disfigurement. "You may with propriety hang upon your walls an oil painting of a Dutchman's breeks drying in the wind with its decorative patches and all, but you may not display your own from your window." But in St. Pancras twenty-four posts have been erected in a circle, and from these, maypole fashion, lines extend to a central octagonal post. On each post is a blackbird and on the centre a jenny wren, all made of glazed pottery, bright with iridescent colours, and designed by Mr. Gilbert Bayes. These things of beauty are placed about new buildings as an attempt to brighten the drab lives of the tenants.

From a sketch by the late W. R. Lethaby.

The Knapp Hall Crypt. The Knapp Hall Crypt, a cellar under the south-east corner of Carfax in Oxford, will, it is understood, be restored and maintained. Above will stand the extension to the Municipal Buildings planned by the City Estates Surveyor, Mr. H. F. Hurcomb. The crypt has a groined and vaulted roof, and is considered to be well worthy of preservation. There has been some confusion between this crypt and the cellars of the old Swyndlestock Tavern on the site of which Messrs. Glyn, Mills's bank, designed by Messrs. H. V. Ashley and Winton Newman, is being erected. Neither the cellars below the tavern, nor any other cellars, which have been demolished in order to allow for the Bank buildings, were of any architectural value. The roof of the Swyndlestock cellar was not groined, and was formed of brick and rubble.

The "George Inn, Southwark. With pleasure we learn that the historic "George" Inn, situated in the Borough High Street, is to be preserved by the Society for the Preservation of Ancient Buildings. The "George" must be one of the last remaining old coaching houses, and only generally known to the few who are interested in historic London and Dickens. It still preserves the atmosphere of romance and it does not require much imagination to visualise the bustling scenes created by the frequent departure and arrival of the coaches. George Scholefields was the tenant in 1809. Not only numerous coaches but wagons and neat postchaises could be had there. The earliest records of the inn we have seen appeared in a lecture read at the meeting of the Surrey Archæological Society, held in Southwark in 1858, entitled "Some of the Ancient Inns of Southwark," by George Corner, F.S.A. In his lecture he says: "This is one of the inns described by Stow as existing in his time, and it is mentioned at an earlier period, viz., in 1554, by the name of "St. George." In the year 1670 the inn was in great part burnt and it was totally burnt down in the great fire of Southwark in 1676. The present building of the "George" Inn is not older than the 17th century, having been rebuilt after the fire on the old plan, and so still preserves the character of an old English inn—with its galleries; galleries which may be seen in drawings by Rowlandson and other artists of the period."

Architects In New Zealand. That the development of architectural education is going steadily ahead is indicated by the prospectus of the University of New Zealand School of Architecture which has just reached us. To-day the New Zealand students have in their own country a fully-equipped, world-recognised University School of Architecture providing courses of instruction in architectural design and construction and at the same time specialising in problems of special local significance. The School of Architecture is housed in well-equipped studios in the new arts building of the University College. The prospectus states that membership of the New Zealand Institute of Architects is recognised as a necessary qualification for practice in New Zealand.

GENERAL NEWS

Professional Announcement.

Mr. Stanley H. Leach, P.A.S.I., announces that he has resigned his appointment as Chief Surveyor to Sir Lindsay Parkinson & Co., Ltd., and has opened an office at Morley House, Regent-street, W.1, to practise in quantities, estimates and accounts. Trade catalogues, samples, etc., may be sent to the above address.

The Prince and the Industries Fair.

The Prince of Wales, it is officially announced, is to visit the Birmingham section of the British Industries Fair, Castle Bromwich, on Thursday, February 25. The Fair opens in London and Birmingham on February 22.

Lecture on Town and Country Planning.

The second of Mr. Leslie Maddock's series of four lectures on the new Town and Country Planning Bill, which was to have been delivered, under the auspices of the London and Home Counties Branch of the Incorporated Association of Architects and Surveyors, at the Institute, 1, Wilbraham-place, S.W.1, on Tuesday, January 26, has unavoidably been postponed to Friday, January 29, at 7 p.m.

Silencing Schemes for the Underground.

The problem of noise on London's Underground is being tested by the Underground authorities by spraying a mixture of shredded asbestos and glue on the upper walls of a tunnel a quarter of a mile north of Hampstead Station. If the results are satisfactory, the whole of the Piccadilly extension will eventually be treated in the same way.

French Art.

An exhibition, entitled "Three Centuries of French Taste," has been organised at the Batsford Gallery, 15, North Audley-street, Mayfair. The exhibition will consist of original drawings by great masters, fine colour and line engravings, furniture, miniatures, silver, tapestry, objets d'art, and fine contemporary books, covering from 1630 to 1930 the field of decoration and design, little represented at Burlington House. It will remain open for several weeks.

Scientific and Industrial Research.

The report of the Department of Scientific and Industrial Research for the year 1930-31 is now issued (H.M. Stationery Office, 3s. net.). The activities covered by the department and its stations are wide and important, and amongst them may be noted research into building, forest products, water pollution, steel structures, illumination, and atmosphere pollution. In view of the fact that the separate report on building research is shortly to be published, we do not propose to comment here on that section. This report, however, contains admirable summaries of this and the many other subjects at present being investigated.

Robert W. Horn, F.R.I.B.A.

The death has taken place suddenly in Glasgow, on January 5, of Mr. Robert W. Horn, the director of housing under the Corporation. He had been director of housing since August of 1928, when he was chosen to succeed Mr. John Bryce on his retirement under superannuation from the office. Previously Mr. Horn had been assistant to Mr. Bryce, and in that position had had a large part in the post-war development of housing in the city. His earlier service as an architect in the City Improvements Department prepared him for this work. Mr. Horn was an architect by profession and was trained in his native city of Glasgow as an apprentice with Messrs. H. and D. Barclay. He was a Fellow of the Royal Institute of British Architects, and had won several distinctions as a technician. On a number of occasions he was awarded premiums on housing scheme designs submitted for competition, and another success scored by him as an architect-competitor was when he shared with a late colleague an award for a design tendered by them for the London County Hall.

The New Spey Bridge.

The new bridge across the Spey at Grantown has been officially opened by The Mackintosh of Mackintosh. The structure includes some unusual features, and forms a notable addition to the number of modern bridges in the Highlands. With the opening of the new bridge the old bridge, which has successfully carried the traffic of the district for 177 years, becomes obsolete. This bridge was built in 1754 by Lord Charles Hay in connection with General Wade's scheme of military roads, and was the first bridge to span the Spey. Messrs. Blyth and and Blyth, MM.Inst.C.E., Chartered Civil Engineers, of Edinburgh, were appointed by the County Councils to carry out the new scheme, and they have been responsible for the design and supervision of the work throughout. The new bridge across the Spey at the foot of Spey-avenue, near Grantown, is a single span of 240 feet, and is about half a mile farther up the river from the old bridge. The bridge is built of reinforced concrete throughout, and is the longest single-span reinforced concrete arch in this country.

Work for the Basket-Makers.

"It's an ill wind that blows no one any good," and the fall in the value of the pound sterling has helped an old British industry. Importers of baskets are finding that it will now pay them better to buy their goods at home, and they are looking to country craftsmen to supply their needs. It is essential, therefore, for British basket-makers to seize this unlooked-for opportunity. In the past the individuality of the country craftsman has been his weakness as well as his strength, and the basket-maker should take heed of this. Individually he cannot hope to supply the market, but once he realises this and is ready to co-operate with his fellow craftsmen a revival in British basket-making will be possible.

In Somerset basket-makers are beginning to recognise this fact, and a step in the right direction has been made with the aid of the Rural Industries Bureau and Somerset Rural Community Council, by the formation of an association for the better marketing of Somerset baskets. The Rural Industries Bureau exists to help country craftsmen, and is actively engaged in organising these craftsmen to supply the home market. The bureau, whose offices are at 6, Bayley-street, W.C.1, is glad at all times to give advice or to answer any questions concerning its work.

Housing of the Working Classes.

In a circular (No. 1238) addressed to local authorities in England and Wales, the Minister of Health states that it is generally admitted that the outstanding need at the present time is for the building of houses which can be let at rents within the means of the poorer members of the working classes. The Minister has therefore suggested to the associations whom he has consulted that local authorities should concentrate their efforts on the provision of a type of house which can be built at a low cost and can be let at a rent within the means of the more poorly paid workers. The type of house which he has in mind is the three-bedroomed, non-parlour house of about 760 square feet, which experience has shown gives adequate accommodation for the ordinary family with children. Houses of this type can, with due regard to economy in lay-out of land and construction of roads and sewers, be built in most parts of the country at an inclusive cost which will allow the rents to be fixed at 10s. a week (inclusive of rates) or less. It is hoped that the concentration by local authorities on the provision of the small house will widen the field in which private enterprise can operate, and that private enterprise will be induced, without subsidy, to provide houses of other types, both for sale and for letting, in substantial numbers. He asks all local authorities to limit their new building proposals in accordance with the suggestions which he has made, and he thinks that it would be an advantage if they would submit their proposals in a preliminary form, with a statement of the facts on which their estimate of need is based, before adopting definite plans and specifications.

A Housing Programme.

A correspondent writes:—

The latest reports of the Nottingham Corporation's schemes are gratifying in that a considerably larger proportion of British materials are being used and that the cost of the houses have come out so low that on several occasions the Ministry of Health have used them as a comparison and various municipal deputations have inspected them. Yet however pleasing these assisted municipal schemes may be to the city council representatives who are responsible for them, to the tenants who are fortunate enough to live in them and pay cheap rents, and to the builders who obtain the contracts in face of fierce competition (and often enough go into liquidation over a number of such "cut" contracts), there is one grave result, as is shown by the fact that the number of houses erected by private enterprise in 1931 was 198. To realise how few this is, we must know that the Corporation have erected an average number of 1,250 houses per annum during the past few years. The inference is that Corporation activity is killing private enterprise, for the speculative builder cannot compete with State-aided municipal schemes, for he must sell his houses at a profit, or else let them to show a fair rate of interest. These municipal development schemes can be far-reaching in the damage they can do. How many architects, estate agents, builders, solicitors, building societies, etc., who suffer, it is difficult to imagine, and when these people are helping to pay for municipal schemes, there surely seems to be something radically wrong, and they have ground for complaint.

COMPETITION NEWS

Birmingham Hospitals Centre.

The subscribers to the Birmingham Hospitals Centre have defeated by 256 votes to 214 an amendment that the scheme should be postponed owing to the financial crisis. The scheme, which aims at co-ordinating the work of Birmingham's two principal hospitals, the General and Queen's, is intended to supply 700 extra beds and to establish a centre for treatment, medical research, and medical teaching. The total cost is £1,250,000, but at the moment it is intended to proceed with a first instalment, which will cost about £700,000, towards which £600,000 has been subscribed or promised. The architects are Messrs. Lanchester and Lodge, FF.R.I.B.A.

An Exhibition House.

The management of the South Wales Building Trades Exhibition, to be held at Cardiff from March 8 to 19, offer three awards of £50, £30 and £20 to the architects placed first, second and third respectively by the assessors on condition that the assessors consider the designs to be worthy of the awards. The competition is open to all architects other than those in practice, and the management have appointed the following architects to act as assessors:—Mr. J. Herbert Jones, F.R.I.B.A., President of the South Wales Institute of Architects; Mr. Morgan Willmott, F.R.I.B.A., Chairman of the South Wales Builders' Exhibition Advisory Committee; and Mr. H. Norman Edwards, 13, Edward-terrace, Cardiff. All designs must be addressed "Architectural Competition," Competition Manager, Building Trades Exhibition, Greyfriars Hall, Cardiff, and must be delivered not later than 1 p.m. on March 1. The subject set for competition is a modern detached house, to cost £1,000. This cost must include the completed structure, garden paths, drains, garage, and all services. Full details are obtainable from the Competition Manager.

CORRESPONDENCE.

National Economy and the Building Industry.

SIR,—While I have no desire to belittle or discourage the efforts being made within the profession to relieve the distress among architects, and especially architectural assistants, I feel that real and permanent help can come only from without and not within the profession. Work is a better panacea for distress than any dole can be, and unemployed architects and architectural assistants want work, not charity, and the same may be said of the operatives.

Rather let us appeal to those who can afford to build for their own and others' needs. Work of this nature would provide employment for architects' assistants, builders, their operatives, and those normally employed in the manufacture of building material, and would fill part of the gap until such time as the Government resume their building and road construction programmes.

And there is another appeal I would make. Architectural schools would be well advised to reduce, at least for the time being, the "turning out" of men into a profession where the supply already exceeds the demand.

EDWIN L. LUTYENS, President,
The Incorporated Association of Architects and Surveyors.
1, Wilbraham-place, S.W.1.

SIR,—I do feel the building industry owes you a very considerable debt of gratitude for so actively pressing their claims at this time. There is a great truth in the proverb that, "it is an ill wind that blows nobody any good," and since the financial blizzard has struck this country it has not only stopped a considerable amount of municipal building, possibly much more than is necessary, or than was justified by conditions, but it has also been an opportunity for the private builder or investor that should not be missed.

Due to the stoppage of municipal building, there are a great many unemployed men, which gives the private investor the opportunity of readily obtaining labour, and this same condition makes it easy to obtain any materials desired, and at prices that will not be maintained once conditions begin to revive. Property is unquestionably changing hands now at a lower figure than has been the case for years, and architects can give undivided attention to new projects in a way impossible in normal times.

Where any manufacturer feels the need for bringing his building up to date, now is his opportunity. He can pick and choose to his heart's content as to site at an appropriate price; as to architect, who has specialised in that type of building; as to builder, who knows how to do work with speed; everything to-day, definitely, in that sense, is in favour of the private investor. The campaign that *The Builder* has been waging to overcome unemployment and encourage building in the industry is more than justified by conditions. The national loss due to putting men upon unemployment allowance cannot but add to our taxes and increase our overhead expenses, whereas, for a very slight addition, a very live asset in the form of an efficient and modern building can be created, that not only gives work to-day, but will win contracts in the future.

By the application of such recognised advantages as the Time and Progress Schedule, which enables buildings to be built at the most appropriate speed and the most economical price, and under the prevailing national conditions, there is every reason why the private owner should be able to make a very satisfactory bargain on his own account.

I have recently made a very rapid trip through France and Italy to Egypt and back, and in places like Genoa, Turin and Marseilles, one sees that our neighbours across the Channel are not allowing the present opportunity to slip away from them. Germany took advantage of the situation during her period of inflation, and has fully re-equipped herself with industrial buildings and machinery.

We have to fight that condition. In the time of this unfortunately enforced "peace" let us prepare for the coming industrial war by bringing our buildings up to the very highest pitch of efficiency, and giving our unemployed in the building trade the opportunity of keeping themselves off unemployment insurance, while providing us with ammunition without which, when the revival takes place, we shall be left standing when endeavouring to compete with other countries who are already making the best of the present time and putting their industrial houses in order.

ALFRED C. BOSSOM.

SIR,—Your article under the above heading is interesting and even exciting, if people will understand its implications.

What is happening is very simple—the Government is supporting banking and deserting building. They are keeping up a rate of bank interest which prevents building. They are withdrawing all loans to municipalities, which might enable building enterprises to go on, because they frankly say to all the world that they have no longer got the money to finance these enterprises. Perhaps all this is inevitable, but what they are not doing is not inevitable. They are taking no steps to make building cheaper by insisting on a reasonable building code throughout the country. Even in London the London County Council and the City of London cannot agree on a uniform code. And nowhere in England, except in the London County Council area of London, which excludes the City, can a really modern hotel be built.

The greatest city in the world cannot build a really modern building because of the laws. Think of that! The only reply our Government seems to be making is to say that we shall not build at all. They are stifling our greatest home industry. They have cancelled £40,000,000 worth of building and thereby put thousands of workmen on to the dole.

Up to date there has been no appeal, as far as I know, to the Government from the building industry as a whole, except on the question of legislation, where the Advisory Council has made itself heard. Architects, builders, and other organisations have, no doubt, put their cases independently and from different angles to the Government, probably often contradicting each other, and thereby providing the Minister of whatever department deals with their letters with a perfect excuse for ignoring them all by saying their arguments cancel each other out.

We want in the building industry, as you so rightly say,* a united voice—the building owners, architects, builders, and operatives—if our voice is to be heard in the land to persuade our legislators that it is false economy to stop building, when at least 80 per cent. of the cost is paid out in wages to our own people in our own country, and the alternative is the non-productive paying out of unemployment benefits.

In my view, the first step should be the formation of a central bank for the lending of money at reasonable rates of interest for rebuilding or modernising our utterly out-of-date buildings, whether they be warehouses, factories, office buildings, hotels, flats, or any other kind of structure, providing they are money-earning enterprises. Many owners are crippled for lack of capital, and are tinkering with buildings which require reconstruction to enable them to function properly in the twentieth century.

To assist such a development, a reasonable building code should be established to operate throughout the country, with the complete abolition of all local Acts of Parliament. These confer special powers in different localities to impose regulations which add quite unnecessarily to the cost of building. I believe that the building industry is quite definitely being crippled for lack of capital, lack of enterprise in itself, lack of support by the banks, and excessive control by the Government and local laws.

Give us freedom and we prosper. Give us control and we languish. Far too much building is to-day controlled by the Government and local authorities, and so we see by a stroke of the pen these millions of pounds worth of work stopped, thousands of men put out of work every day, and organisations built up by architects and builders broken up, only to be gathered together again in a hurry when somebody somewhere realises the mistake that has been made.

H. B. BRYANT.

* Since this letter was written, we learn that a deputation is to call on the Minister of Health on February 4.—ED.

"The Future of English Domestic Architecture."

SIR,—My attention has been drawn to Mr. Wm. Davidson's letter in your issue for January 1. He has got hold of the wrong end of the stick. He appears to think that the arguments of the mechanists are my own views. They are nothing of the kind. I went to great length to give my own views about this contentious matter, as Mr. Davidson will discover if he will do me the honour of *carefully* reading the report of my paper which appeared in *The Builder*. Briefly speaking, I said the reason why I approved the mechanists was because I thought revolutions stirred people up and made them think. I likened mechanism to a new-born child, which, however ugly at the time, *might* grow up into a healthy, beautiful and flourishing one. Much of what Mr. Davidson says I agree with, but I think it is quite absurd of him to suggest that the commerce in old staircases, mantelpieces, panelling, etc., can be dismissed as bearing very little relation to the production of fine architecture.

He quotes the Parthenon as a beautiful building. What would the architect of that temple have said if he had been told to "work in" a nice old Egyptian frieze which was "intrinsically beautiful"? It is this prevalent notion that separate units which were beautiful when they played their part in bringing about a unified whole can still remain beautiful and desirable when they are torn out of that whole, which does so much damage. This is the influence of the "antiquaire," and it is a poisonous influence.

DARCY BRADDELL.

Quantity Surveyors and the War Office.

SIR,—Major G. B. J. Athoe's letter dealing with this subject does not take him much farther. Surveyors have the remedy in their own hands. If surveyors cannot be loyal to the societies which represent them, by refusing to work for less than the recognised rates, they have no reason to complain. Members of the R.I.B.A. have to sign a declaration not to undercut fellow-members, and there is no reason why an association representing surveyors should not adopt similar precautions. It is the lack of loyalty which is at the root of this matter. Obviously, if all Government Departments which do not pay standard rates of fees were boycotted, they would soon come to their senses.

WILLIAM DAVIDSON.

The Sticking of Gates.

SIR,—I canvass all day house to house, and often have to struggle with stuck gates to get them open. Would not a simple remedy be to leave a small space between the two halves of double gates? Again, all gates would shut without a spring if the gate-post was placed ever so slightly out of true—not enough to be noticeable by anyone. But I realise this bit of commonsense is not to the advantage of builders, as they would not in that case have to charge for a spring!

E. W. S.

(*Continued on page* 192.)

PRESIDENT'S ADDRESS TO STUDENTS.

The address to students was delivered at the Royal Institute of British Architects on Monday night by the President, Dr. Raymond Unwin.

Looking back over fifty years, commenced the President, he had noticed few ways of making a living which offered a better life than the career of architecture: nothing more satisfying for which one could barter it. With that good life, however, students had best be content; for having that, they had their share; and could afford to leave wealth and much else to those who had nothing more interesting to pursue. Goethe, with a mixture of seriousness and irony, said: "He who has Art or Science has Religion too. He who has neither Art nor Science had better have Religion." Perhaps it was because the good architect must have both Art *and* Science too, and must be imbued with the reverence which both inspired, that he might enjoy so good a life.

In his (the President's) young days they looked to the genius of Ruskin for their modern ideas; and his eloquent prose was their inspiration. To-day new gods and heroes were worshipped. It might be that his joy in rediscovering the origin of much architectural adornment in a love for the simple beauty of natural objects, led Ruskin sometimes to ignore the fact that the mind and imagination of man were also parts of nature, and might evolve forms of beauty not found where the play of their influence formed no part of the environment. Spite of this, Ruskin was, perhaps, more modern in his views of natural beauty than was always now realised. Those who regarded adaptation to purpose, expression of function, as the main paths to beauty, should think twice before they despised Ruskin's love and reverence for natural forms. Surely, amidst much that defied analysis, the one underlying cause of that beauty in nature which we could in part understand was a very close adaptation of her forms to all the conditions, leading to right relations. The student might say: "Yes, that is all very well; but I and my ideas are also a part of nature: and I want to express myself." No one to whom the spirit of man was something of supreme significance would take exception to the claim. If such a personal expression sprang from the individual's power to penetrate deeper into the nature of things, or to understand more of the humanity of which he formed a part, then indeed the expression would bear the hall-mark of value, and come with the charm of true originality. That such expression was supremely desirable, however, conferred no merit on the perpetuation of mere personal oddities, and in no way excused the exhibition of forms, clumsy by reason of incompetence, or distorted by reason of a passing fashion or a diseased fancy. The significance of an individual arose not from the accidental eccentricities which set him apart from his fellows, but from the depth to which he imbibed, and the clearness with which he could express, the spirit of humanity which he shared with all. The expression of that humanity was perhaps his typical natural beauty. If Ruskin's writings were read with discrimination, which should be the easier to-day because of the different aspects stressed since he wrote, there would be found much in his love of natural beauty worthy to be carried forward. It might at least save us from having to rewrite a passage in the Psalms to read: "The heavens proclaim the goods of commerce, and the firmament showeth its salesmanship."

There was another gleaning which he hoped they would try to carry forward. To William Morris, art was the expression of man's joy in his work; and his life was spent in exploring the endless possibilities of such enjoyment, and was completed in a desperate attempt to secure for all men the kind of work in which some gladness might be found, and the conditions of labour in which it might be enjoyed. Mechanisation had, however, been moving on since then. To quote from Dr. Josef Frank, of Vienna, a well-known exponent of modern architecture: "We acknowledge nowadays the paramount importance of machinery, and we are able to adapt it to our artistic purposes. . . . The naïve work of the artisan who . . . fashioned his own crude though sincere works of art has gone out of existence. To-day he is compelled to work to drawings which others, namely, those who know but whom he does not understand, have made for him. His co-operation is no longer required, and the artisan of the present period is simply a factory labourer, without machine tools. This is a fact which is only too well known, although we lack the courage to drive the matter to its final and logical conclusion." What that might be was not at all clearly stated. That was written less than a year ago. Already one would perhaps write with less confidence and satisfaction of the inevitable sweeping forward across the world of mechanisation and mass-production. To-day, indeed, many were anxiously wondering whether that disorderly onrush might yet be stayed in time to be brought under control; or whether it must indeed race on to that logical conclusion, which, if so, seemed only too likely to resemble the end of the Gadarene swine.

At this drama which was being played out before our eyes on the stage of world industry and commerce, we could do little more than look on; except that we might well allow our interest in the tragi-comedy to dispel a futile anxiety as to the conclusion; and, by carrying on with as little disturbance as possible of our normal habits, abstain from adding to the confusion. In this spirit, then, let us carry on with our subject, still trying to cherish a conviction that men were destined to find some better system of life than one which would convert them into a multitude of Robots, tending machines in their working hours, and playing or watching mechanised sport in their off-time. While doing so, however, we must realise that we lived and worked in an age much dominated by mechanism; we could not escape its effect or fail to express its influence. We must go through it, as children with the measles. We might, however, recognise also that it was but a passing phase; and whatever style of building might be evolved to meet it, he would beg them to carry forward as a vital memory from William Morris the certain conviction that art was somehow dependent on men's joy in their work, that no style of architecture was likely to be truly noble, or long abiding, which ignored the part that the people must play in it, which denied all share in the joy of creation to workmen "whose co-operation is no longer required."

The escape from excessive mechanisation would not be found by retracing our steps. We could not unscramble our eggs. We might, indeed, wisely look back for experience; but we must look forward for realisation. The attempt of Ruskin and others to return to Gothic was eloquent of this lesson. Whatever aspect of architecture might figure most prominently in our favourite definition, it was an activity so intimately identified with the life and conditions of the day, that, as Lethaby put it, "Architecture must be a living, structural art, always adjusting itself to changing conditions of time and place. If it was true, it must ever be new." It would be noticed he did not add, that if it was new it must ever be true!

Life and architecture were indeed inseparable, and had much in common. The students' study of architecture would give them invaluable insight into life; and the widest experience of life would give firmer grasp for their practice. Architecture, like life, was an art based on science. Those two aspects could not be separated; but the rules of their respective games could be recognised and followed. Building science dealt mainly with materials, quantities and measures: art was concerned with values which sprang from relations and proportions. When working in the sphere of science they should be sure to get measures precise, quantities exact. In that sphere three and two must make five, not more nor less at their peril. When working in the sphere of art, it was the qualities and the harmonies that mattered. In that sphere if three and two made but five, one would fail. To be art at all it must make five plus *X*—of utility, meaning, feeling, pleasure or beauty, springing from the relations which constituted the design.

The monotony of the row of houses, through design, acquired the unity and rhythm of a Bath Crescent. The compilation of incongruous parts and features became the unified expression of a convenient and orderly plan through appropriate elevations, relieved and adorned by well-related parts.

That transformation was the result of a definite design, conceived beforehand, and seen by the imagination as the form most appropriate for expressing the purpose and the structure which utility and science had prescribed. Provided those dual requirements were satisfied, in that sphere design was entitled to rule as supreme partner in the diarchy. He used the word "design" because it was desirable to avoid confusing that word with the fine arts, for the practising of which there was needed a supremely fine adjustment between hand, eye and imagination, constituting a skill to the possession of which the architect laid no claim, and of which he had need only to the extent required for good draughtsmanship. It was fortunate, for the faculties needed to create good architecture to-day even for the simplest cottage building were varied enough. The science of building was becoming more essential. No ability to adorn the face of a client's building would excuse for endangering his safety, destroying his comfort, or unduly depleting his pocket.

The full endowment in all directions many might not expect to possess. Forms of co-operation were essential. It was as important to realise what we did not know as what we did.

Even within our own work we were greatly relieved in the sphere of quantity by the surveyor. The structural engineer was a rising profession. The development of the Institute of Builders gave him personally the further hope that in the near future the architect might be a little less distracted than he often now was from that main function of planner and designer through which he created values alike of utility and beauty. The architect, however, though he might specialise on design, must never become an expert in the sense of the definition given in some examination. "An expert is one who knows nothing else." If an honours man in one branch, he needed to be a pass man in many. The last thing he should do was to stand aside from the life of his time; for he needed to know and understand as much of it as might be. To his community also he owed the contribution which his dual training, constructive and designing, peculiarly fitted him to make. Building, we ought to remember, was a co-operative industry in which all had an in-

terest. Co-operation only worked effectively when each section recognised the several functions which had to be contributed, and was content to play its part, knowing all were essential to success, and that the perfect doing of each offered an honourable outlet to appropriate faculties. There was much, for example, even to the beauty of the result, which the understanding workman could contribute; much which we should generally lack until we could secure his intelligent co-operation. The times might make this difficult; but it was well to realise that the architect, so far as he claimed to be conductor, was dependant on his orchestra and on eliciting from each the best rendering of his part.

Sir Cyril Kirkpatrick, President, Institution of Civil Engineers, in proposing a vote of thanks to the President, said that there was a natural affinity between the professions of architecture and engineering. He himself could lay claim to no buildings except to structures under water where no one could see them. But wherever one's work lay, the great thing was to do it with a joyful heart.

Mr. Montague Wheeler, seconding, said that the President had reminded them that art was always forgetful. But art was also young, and he believed that it was the pursuit of the quantity "X" which kept the true artist always young.

The President, replying, said that he agreed that the joy of life lay in the pursuit of "X." That being so, it was a good thing that we never caught him up, though it was pleasant to feel that sometimes we got near to him.

The President then presented the awards to the successful prize-winners. Besides those in the list given in our issue for January 8, prizes were awarded to the successful candidates for the other studentships and prizes awarded during 1931 :—

The R.I.B.A. (*Archibald Dawnay*) *Scholarships.*—J. R. Baxter (Liverpool School), D. L. Couves (Armstrong College, Newcastle).

The R.I.B.A. (*Henry Jarvis*) *Studentship at the Architectural Association*).—B. P. Westwood.

The R.I.B.A. (*Howard Colls*) *Studentship at the Architectural Association.*—N. C. Westwood.

The R.I.B.A. (*Donaldson*) *Silver Medal at the Bartlett School of Architecture, University of London.*—(1) F. E. Kerswill, and (2) C. P. Saurin.

The R.I.B.A. (*Anderson and Webb*) *Scholarship at the School of Architectural Studies, Cambridge University.*—N. G. W. Walker.

The R.I.B.A. Maintenance Scholarship in Architecture.—C. L. Sjoström, who was awarded the Ralph Knott Scholarship tenable at the Architectural Association, London.

At Monday's meeting of the R.I.B.A. the Hon. Secretary announced the death of Edward Hewetson, elected Fellow 1888, transferred to list of Retired Fellows 1926; Robert William Horn, elected Associate 1895, Fellow 1929; Charles William Davies, elected Associate 1876.

THE WIT AND WISDOM OF LETHABY

LETHABY AND THE ARTS.

We give below more of the witty sayings of the late W. R. Lethaby, this selection being some of his thoughts on the Arts, of more than ordinary interest to our readers in view of the "Lethaby Night" at the R.I.B.A. on February 15, when Sir Reginald Blomfield is to read a paper on "The Work of Lethaby." Previous selections of epigrams appeared in our issues for January 8 and 15.

"Art is the well doing of what needs doing: the right aim is doing necessary things beautifully."

"When you are going in the wrong direction, all the right things are on the left."

"Preconceptions colour conclusions."

"We should live *pour encourager les autres.*"

"Our horizon rises with us."

"We feel round the walls of our limitations like a swallow in a barn."

"Good sense is very dull in advanced circles."

"Do that which must be done; what will come welcome!"

"The greatest of all is that which is common."

"A thing that is good enough is one kind of perfect."

"The cult of comfort is a curse of civilisation."

"Once Art was not talked about, but only done."

"That which is always true must ever be new."

"'Tis up the steep to reach the peak."

"We may become too refined for life—too soft to survive."

"Beauty is the complexion of health. In the arts we are too much concerned with different kinds of rouge."

"Old Art was conditioned and circumscribed; now we might do anything—only we can't!"

"The eminence of the artist means the impoverishment of Art."

"All that is within is capacity; all that is without is opportunity."

"The world has developed through the Stone, Bronze and Iron Ages into the present Paper Age."

"Poetry and Beauty and Reality are one."

"Art is the mastery of toil, the redemption of slavery."

"Art has been made so precious that there is precious little of it. Once the solace of the maker, it has become the toy of the idler."

"Old customary art was a tenderness of mind given to the hard-handed; modern art is soft-handed but hard-hearted."

"History is what is thought to have happened; the real thing was different."

"We should think in things rather than in words, in realities rather than in reflections."

"Artificer and artist seem to be two forms of the same word. One has gone up in the world, the other down. Which is which?"

"The important thing is what you see after you have turned away."

"What we think we are, what we are we do, what we do we make the world."

"What we call things are our way of looking at appearances."

"Great Art is an ancient tree with deep roots."

"Carts and harness are usually beautiful; horses seem to object to bad art."

"We spend our money for that which is not Art, and our strength on shams."

"There must be activity in a work of Art. Taste will never accomplish it, gusto may."

"The modern sham Gothic fittings and glass in Westminster Abbey are even more injurious than the pompous tomb-trophies, because they are more specious and confusing."

"The power of the purse may be the greatest of tyrannies."

"Fair surroundings affect the mind, and order is moral as well as material."

"Vital originality is standing on the circle of the known, reaching out to that which is beyond."

"Tall trees must have strong roots."

"Art is a natural human aptitude, which has been explained almost out of existence."

"Architecture should not only be strong-handed and clean-minded, but kind-hearted as well."

"Life is from the soil."

"Great Art, like great Science, is the discovery of necessity."

"Much that calls itself Art is dust—thrown into our eyes—Ashes for beauty."

"Art is not shape and appearance; it is fine response to noble requirement."

"We proceed by the method of trial and error; sometimes by re-trial and re-error."

"There are cross-currents and eddies, but the question is what way is the tide flowing."

"Music, poetry, Art springs from deep sources of the spirit: if you clear the wells the waters will flow."

"What is spent on picture postcards would buy a picture."

"Every work of art looks as if it were made for one human creature by another."

"If you won't look forward, you will have to look out."

"Poetry, song, and dance are natural modes of expression; living art is folk art."

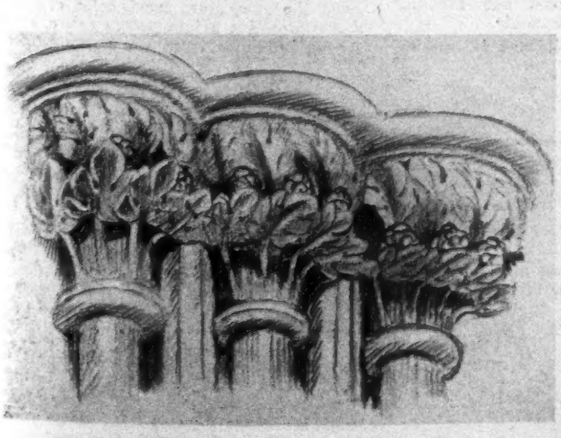
"The helplessness of modern Art is the measure of the hopelessness of the worker; there is justice in the universe."

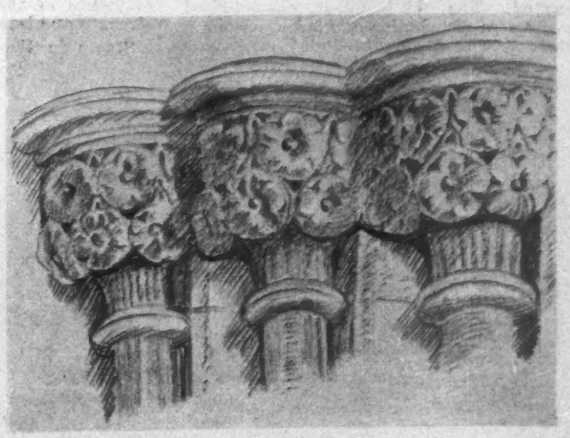
"An intention to be artistic slays art; putting seeming for being."

"In art the letter killeth; 'tis the spirit that makes alive."

"Building blesses, Architecture curses."

"Everyone would produce Art if so much had not been said of it that none but professors dare to profess."





From pencil sketches by the late W. R. Lethaby.

VALUES IN MODERNISM

III.—THE DEVELOPMENT OF NEW STYLE.

By FRANK BENNETT, A.R.I.B.A.

The fact becomes more and more apparent every day, that we shall not attain to any state of perfection in English architecture while we put aside our own traditions and study too zealously the mannerisms of the individual genii who crop up in Europe every now and then. We are not alone in this respect. Is there any one country not suffering in the same way, and in consequence failing to reach the expected culmination? It still remains for a concerted point of view to bring about the desired result in each country.

The district of Provence and the south coast on either side of Toulon is peculiar in having arrived already at its own point of view architecturally, and in having developed a complete new architecture of its own, and the reasons behind this achievement may prove to be instructive.

The coast towns have expanded rapidly in response to an increased popularity, and many new buildings are going up. The climate has no vagaries, the sun shines nearly the whole year through, and the surroundings are ideal. There are background settings of blue hills and olive-green foliage, and foregrounds of ultramarine sea, umber brown rocks and majestic palm trees. The air is rich and warm, and the ground dry and firm. In addition, planning requirements are simple and definite. Unlike the older towns at the eastern end of the coast—Cannes, Nice and Monte Carlo—there is little established character to fetter new ideas, and a modern

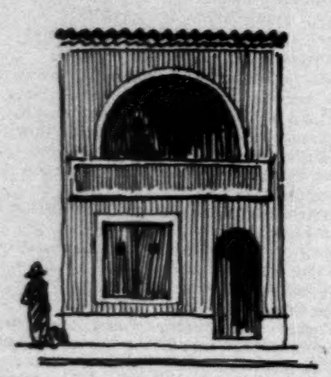


Fig. 1.—An Old Terrace House at Sanary.

architecture is readily accepted by the new inhabitants and visitors who are mostly of a highly sophisticated type.

Seizing the opportunity presented, the designers of the new buildings have hit on a pleasing blend of architecture compounded of the local traditions, and the broader type of architecture now more or less universally accepted. The old buildings, characterised by a severe distribution of window openings, chiefly consisted of gable-ended structures with rubble walls, stucco-faced and colour-washed. Then low-pitched roofs of curved tiles were supported at the eaves by waving lines of tile corbels. All the windows were given shutters, but nothing was expended on ornamentation. There are some loggias like the one in the old house at Sanary (Fig. 1), which are an exception to the rule of severity, but these are very rare.

In the new buildings the stucco and colour-washed walls remain as the chief characteristic. Arches are introduced. Loggias running into three or four arches supported on sleek cylindrical columns introduce new and delightful varieties of de-

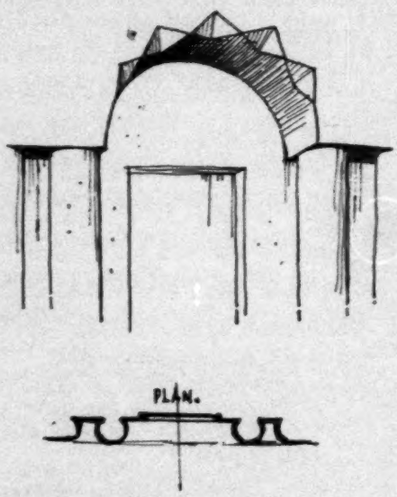


Fig. 2.—Facetting to Emphasise an Arch.

sign. Columns are sometimes attached or sometimes free-standing, either ranged in couples or standing single. The red wave-line cornices of traditional origin are a persistent feature, and serve to crown walls which are no longer surmounted by pitched roofs. Shapely balconies with pierced balustrades swell out from deep-set windows, and the gardens, terraces, and approaching avenues are marked off by pergolas, brightly coloured and delightfully proportioned.

The colours everywhere are strong. One is amazed by the brilliant combinations of reds, yellows, browns, and blues. What in England would be ranked as crude discord passes here as normal colouring. It is quite common to see walls of a rich brown combined with woodwork and shutters of a deep ultramarine blue, and this in addition to bright red-tiled roofs. Pale and broken colours are not satisfactory; the brilliance of the sun takes out all the strength and leaves them anæmic.

Stucco in the new buildings is applied with considerable subtlety. Rough-cast and light pebble dash are put on the main surfaces, while special features and the linings to openings and arches are finished smooth and lipped over neatly at the outer edges. There is little or no exposed brickwork and no stone jointing, the contrast of masses often being relieved here and there by red

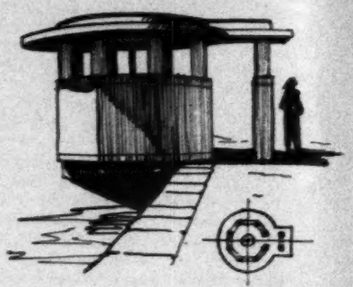


Fig. 3.—A Concrete Structure Overhanging the Quayside.

tile details, this affording the main interest in the composition.

Planning, in few ways remarkable, is characterised by an easy and intimate arrangement of compartments, the living-rooms leading into one another and the main approaches passing across terraces and loggias. Compositions are symmetrical, great play being made with outside stairways and terraces to develop the opportunities afforded by sloping and rocky sites.

As often the case in France with buildings of a semi-public nature, more money is spent on architecture than on sanitation. So it is in this district that sometimes the standard of planning falls far short of the excellence of the elevations. One up-to-date hotel just being completed, for instance, was

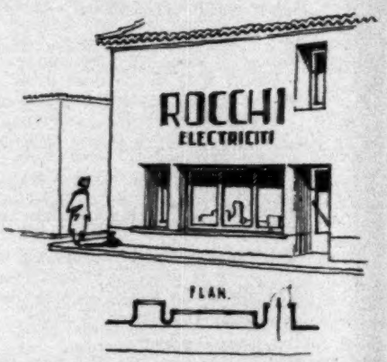


Fig. 4.—Old Structure Converted to Shop.

found to provide only one ventilated water-closet for fourteen bedrooms on one floor.

The little structure in Fig. 3, a public convenience projecting over the water front from the quay side, constructed of concrete and coloured a bright yellow ochre, shews a strong influence from the north, while the

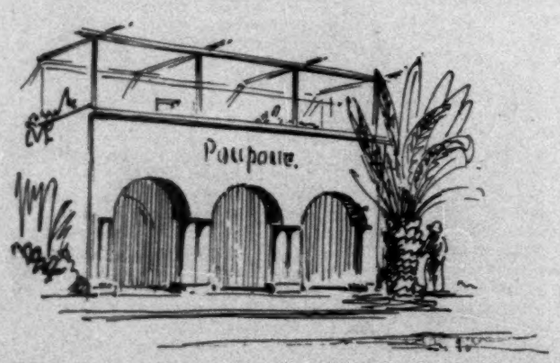


Fig. 5.—An Open-Air Cafe at Bandol.

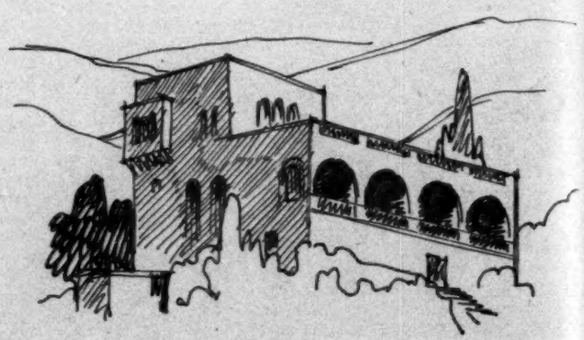


Fig. 6.—A Villa on the South Coast of France.

small shop in Fig. 4 is an example of how new forms are grafted into an old structure.

The two villas in Figs. 6 and 7 show how effects of massing become the dominant consideration in design and how pitched roofs are dispensed with. Arcade rhythms provide a strong contrast, and ornamental details are sparingly used. The seafront café in Fig. 5 was selected for illustration as a characteristic example of small-scale design. The facetting of the arch in Fig. 2 cannot be ranked as local style, but is interesting as an idea.

(To be continued.)

R.I.B.A.

THE CODE OF PROFESSIONAL PRACTICE.

On the recommendation of the Practice Standing Committee, the Council of the Royal Institute of British Architects have revised Clauses 1, 2 and 3 of the Code of Professional Practice, as follows :—

1. An architect is remunerated solely by his professional fees, and is debarred from any other source of remuneration in connection with the works and duties entrusted to him. It is the duty of an architect to uphold in every way possible the Scale of Professional Charges adopted by the Royal Institute.

2. An architect must not accept any work which involves the giving or receiving of discounts or commissions, nor must he accept any discount, gift or commission from contractors or tradesmen, whether employed upon his works or not. An architect employed by a commercial firm must be remunerated only by means of a salary, and this remuneration must not depend upon commissions based on the profits of the firm.

If an architect own, or have a commercial interest, either as a director of a company or as a consultant or adviser, or as a shareholder, in any material, device or invention used in a building, he must inform his client thereof, and must obtain his sanction before specifying the use of it in works under his direction.

3. (*a*) An architect must not advertise nor offer his services by means of circulars or otherwise, nor may he make* paid announcements in the Press. He may, however, notify his correspondents by post once of any change of address.

(*b*) Though there is no objection to any architect allowing signed illustrations and descriptions of his work to be published in the Press, with reference to such illustrations or descriptions it is contrary to professional ethics :—

(1) To give monetary consideration for such insertions;

(2) To allow such insertions to be used by the publishers for extorting advertisements from unwilling contributors.

(*c*) An architect may sign his buildings and exhibit his name outside his office and on buildings in course of execution, including those where he is acting as architect for alterations and additions, provided it is done in an unostentatious manner, and the lettering of his name does not exceed 2 in. in height. With the client's approval, any such boards may remain for a period not exceeding two months after the completion of the building, provided that they do not display : "To Let" or "For Sale," or similar notices; but they may indicate that the plans can be seen at the architect's office.

(*d*) Architects who are surveyors to recognised estates may announce land or sites or premises for sale or letting in connection with their appointments, or when they are acting as architects for the development of land or sites.

* Note.—This does not refer to advertisements or letters respecting appointments open or wanted, nor to the insertion of one notice of change of address in the professional Press.

Clause 12 has been deleted, as the substance of it has been embodied in Clause 2.

"THE BUILDER" DEBATE

XLVII. — ARCHITECTS AND CONTRACTS.

Sir,—I am sorry to have irritated my opponent with the complaints which I have made against the typical architect, though I am not sure that he has not presented me with my strongest argument by the fact that his reply lacks the dignified calm of convinced innocence.

May I also make use of one of his main arguments? "Negative" defends himself against the attack of a builder who grumbles at his parsimony in dispensing plans by the extraordinary comparison that : "The contractor himself never dreamed of doing any job of work without being paid for it." Now I suggest that this exposes a more woeful ignorance of the inner workings of a builder's office than that of the architect's office which he attributes to me.

Let us be thoroughly comparative if we must. I have at my elbow a publication which includes a scale of charges for architects, as authorised by the Royal Institute of British Architects. I note that there is a fee due to the architect for "preparing an approximate estimate of cost by cube or otherwise." There is also a heavier fee due also for "obtaining tenders." So far as I can see the architect need do nothing in professional services for which he cannot demand payment. Yet he is a party to putting a number of contractors to the expense and time of pricing quantities for the purpose of tendering, with no recompense to any of them but the successful firm. He is even a chief party to putting a number of contractors to the expense and time of taking off their own quantities in addition to the above services; and takes the whole thing for granted, although he is in a chief position to know that an allied profession would charge 2½ per cent. for the same services, "win, lose or draw." Far from "never doing any job without being paid for it," the contractor has to keep a large proportion of his office staff continually employed on estimating work for which he will never be paid. That this fact is not recognised comes hardly from one in a profession that can demand payment for an "approximate estimate," which is a phrase I can find very little different from the good old English word "guess."

Let us turn from this onerous state of affairs to the minor service which I have suggested the architect might reasonably undertake for the smoother working of his jobs, viz. : The more willing issue of sufficient copies of his plans for the use of the many departments involved in the building process. "Negative" makes quite a little song about the cost of "careful scrutiny, despatch, collection, and redespatch" of prints and cost of same. So far as I can see, this represents some such budget as the following : Scrutiny by responsible assistant, ten minutes; despatch, 1½d.; collection, half a minute of office boy's time; redespatch, 1½d.; cost of print, 8d. There does not appear to be much in it, and the fact of the matter is that the typical architect runs his office on the cheap, and is unable to cope satisfactorily with the various little matters of business which though individually trivial are of key importance to the running of a job.

I think any dispassionate observer would agree that "Negative's" defence in this particular point is very thin. Now as to the matter of attention to jobs in course of running. We cannot use our particular experiences as arguments, although we may accept each other's statements as true. All I claim is that if I accept "Negative's" statement that his experiences show that the typical architect is all that can be desired in his attention to the job, he must accept mine that my experience is the exact reverse.

"Negative" supports his statement with what he considers a probability, viz. ; that as the architect finds the quick job the most profitable, he is not likely to be dilatory. The argument is no more convincing than I can deduce from other probabilities. I note in the same Scale of Charges to which I have referred that the architect has earned two-thirds of his fees when the contract is made, and that the remaining third becomes due in stages as the job works through to completion. Now surely it is clear that it pays to attend to this first period over a large number of jobs and let the balance of service fit in as it will, than to attend faithfully to the whole course of a less number of jobs. The probability of such a point of view being followed is far greater than that which "Negative" quotes, and is at least as sound an argument as his, once we have descended from the high plane of assumption which places a professional halo upon the architect's brow.

My charges are not in any way wild, though they may be sweeping. They are made after careful consideration and much thought applied to my own personal experience added to that of others of my kind who have suffered in a similar way.

In closing the debate so far as it rests between "Negative" and myself, may I make an appeal to architects to set their houses in order and give to those they control a fair chance to back them up in the high purpose of good building.

Positive.

[Correspondence upon this question is invited.—Ed.]

Local Government Engineers.

The Institution of Municipal and County Engineers has issued a little pamphlet, "Model Regulations for the Employment of Engineers and Surveyors by Local Government Authorities in England and Wales." Covered therein are such subjects as Qualifications, Terms of Appointment and Lists of Duties, and Minimum Salaries.

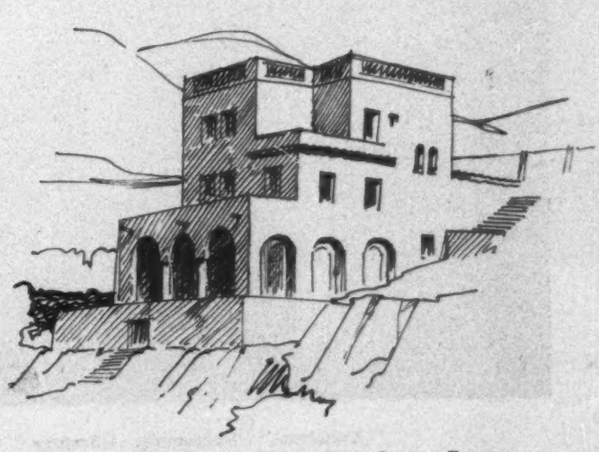


Fig. 7.—A Villa at Bandol, South Coast of France.

ILLUSTRATIONS

PLATES.

"Axholme," Noctorum, Cheshire.

Designed by Major Gilbert Fraser, M.C., F.R.I.B.A., "Axholme" has been erected on a portion of the old Chenotrie Estate at Noctorum, Cheshire, now divided into building plots comprising about two acres, and "Axholme" stands on a plot with an east approach co-extensive with the old Noctorum-road. The house is of a Tudor character and built of 2 in. Buckley tapestry bricks with Grinshill stone dressing and the roof is covered with green Westmorland slates. The district is well wooded and the material selected appears to blend with the surroundings. The whole of the entertaining rooms are placed towards the sun and a loggia is provided with glazed folding screens of "Vita" glass for use in the winter. This loggia is heated from the apparatus that serves the house. The internal furnishings are in oak and the ceilings are enriched in plaster. A lift is provided to all floors and the servants' quarters are a complete unit of their own, situated on the upper floor.

Warner House, Wardour-street, W.

The elevation we give shows only part of the building as built. The actual elevation is nearly 20 ft. longer. The plan includes two separate buildings, the larger an office building, and the smaller, in the south-west corner, a film store building. The latter contains the cells for the storage of film, one ton to each cell, and is protected by fire-resisting doors, sprinklers and drenchers. It is approached only from the open air on each floor, there being a platform on every floor outside the back staircase giving access to the smaller building. The office building has been designed for good natural lighting and easy subdivision. The steel is in long spans with a minimum of central stanchions, and the front elevation has over 20 ft. between the piers. The bays give very easy subdivision and also a maximum of light, presenting themselves to the sky at various angles. The whole of the glazing is in "Vioray" glass. The window aperture is the most obtainable under the London Building Act. The design is intended to express modern lines and steel construction, as well as being suitable to such an essentially modern industry as that of the cinema. The general contractors were Messrs. C. F. Kearley, and amongst sub-contractors were :—Crittall, windows, lanterns, mullion and apron castings, iron doors; Dorman, Long, steelwork; Caxton, floors; Colley Meikle, heating; Bective Electrical Co., electrical work; Greenway and Ludlow, Portland stone and Travertine wall linings to stairs; W. Courtney, masons; F. Braby, copper roof mouldings and ribs; Potter Rax, handrailing and balustrading; Waygood Otis, lifts (modern self-closing doors, etc.); Limmer and Trinidad, asphalt; Hoffman Sprinklers, sprinklers and drenchers; Kemp and Co., electric light fittings; R. Fox, cellulose bronzing; and Thomas Parsons, paint.

The consulting engineer was Mr. B. L. Hurst, and Mr. James J. S. Naylor, F.R.I.B.A., was the architect.

First Church of Christ Scientist, Bromley, Kent.

This building was planned as a church audience hall and school hall on a square corner site. The octagonal form of hall was decided upon to obtain a large central unobstructed area for the audience and to provide good acoustic conditions. At the same time this form enabled the minor offices to be provided in the positions best suited to their use. The main principal in this type of plan gives very economical results in the form of construction—namely, the main mass and weight of the building is carried to the foundations on four massive piers; these piers also carry the main steel girders of the roof, with the result that the foundation work is reduced to the minimum. The administrative offices form a one-story structure with only shallow foundations. These structural characteristics are utilised in the elevation to form a spreading octagonal base for the lofty super-structure of the auditorium.

A highly important element in the form and plan of a Christian Science Church is to obtain exact and successful acoustic conditions, not only for the speakers on the platform, but from any seat in the auditorium. This type of plan provides bay-shaped wall surfaces behind every section of the auditorium in addition to the platform. The provision of a flat ceiling, not exceeding 36 ft. in height from the general floor level, is also a main factor in obtaining good acoustics for speakers in the audience. In this instance a plaster ceiling was provided of a slight fan-shaped character to relieve the otherwise dead appearance of a vast flat area. The organ chamber is placed in the rear of the platform, from which the sound waves enter the hall from large ornamental plaster grilles.

Two-inch Dutch purple-grey bricks form the general surfaces and spaces with 2 in. English light-reds for all features, shapes and angles. The combination of these colours, with a bright cream line mortar joint, gives an alive and brilliant texture of a permanent nature.

In the construction of cornices, friezes, caps and bases Roman tiles in three varying thicknesses were used. In the main entablature the frieze and architrave were finished with all vertical joints in red-coloured mortar, so that only the horizontal joints are perceptible, giving a truer trabeated effect and removing the negative result of brick bonding in this position. All the joinery is constructed of oak bleached with lime.

The architect is Mr. W. Braxton Sinclair, F.R.I.B.A.

The Hove Pier.

This pier will be constructed of reinforced concrete, 1,450 ft. long and 90 ft. wide, with a covered way. It will be the widest in Great Britain, and at the entrance a theatre will be erected surrounded by an arcade of shops. A large restaurant and concert hall will be built in the centre, and at the end of the pier a kursaal for amusement and exhibitions will be erected. There will be seating accommodation along the whole length on both sides, and at the end of the pier a landing stage, for cross-Channel boats and coastal steamers, will be constructed. Passengers will be able to embark at almost any state of the tide. Fishing decks will be provided for anglers and a club will be formed. The pier, when completed, should be the finest in the British Isles, and up to date in construction and attraction. A solarium or sun-parlour will be erected. Fifty shops will be erected on the front and surrounding the theatre in the form of an arcade. In the

(*Continued on page* 192.)

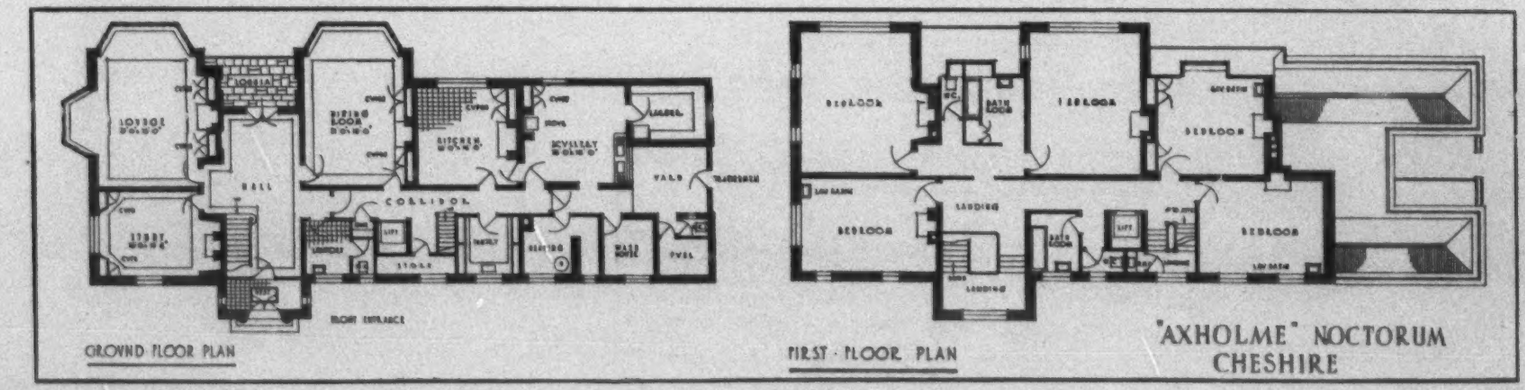
"Axholme," Noctorum, Cheshire: The Entrance Hall.

Mr. Gilbert Fraser, F.R.I.B.A., Architect.

"Axholme," Noctorum, Cheshire: South-west Angle.

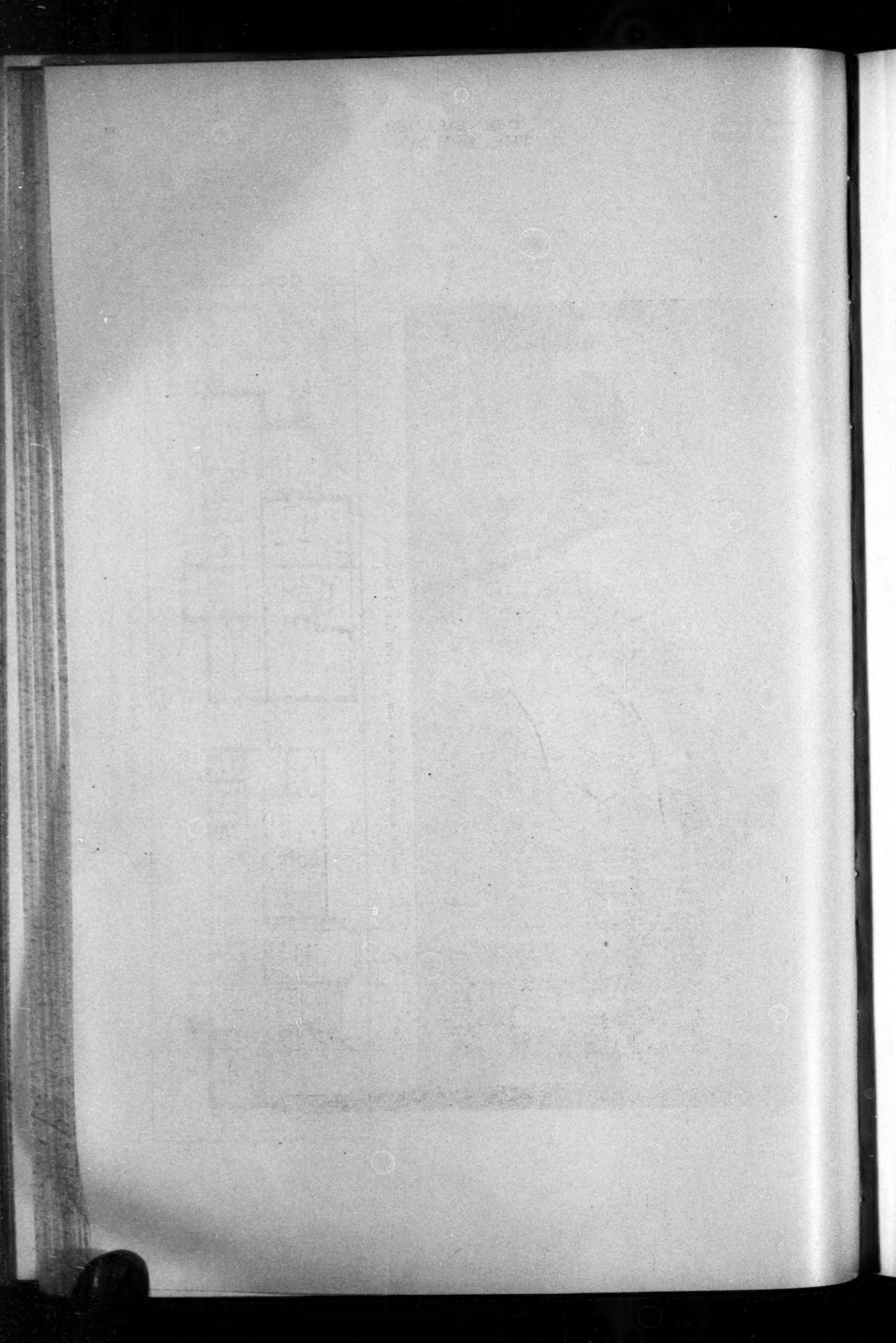
Mr. Gilbert Fraser, F.R.I.B.A., Architect.

THE ENTRANCE FRONT AND COURTYARD WITH GARAGE BEYOND.



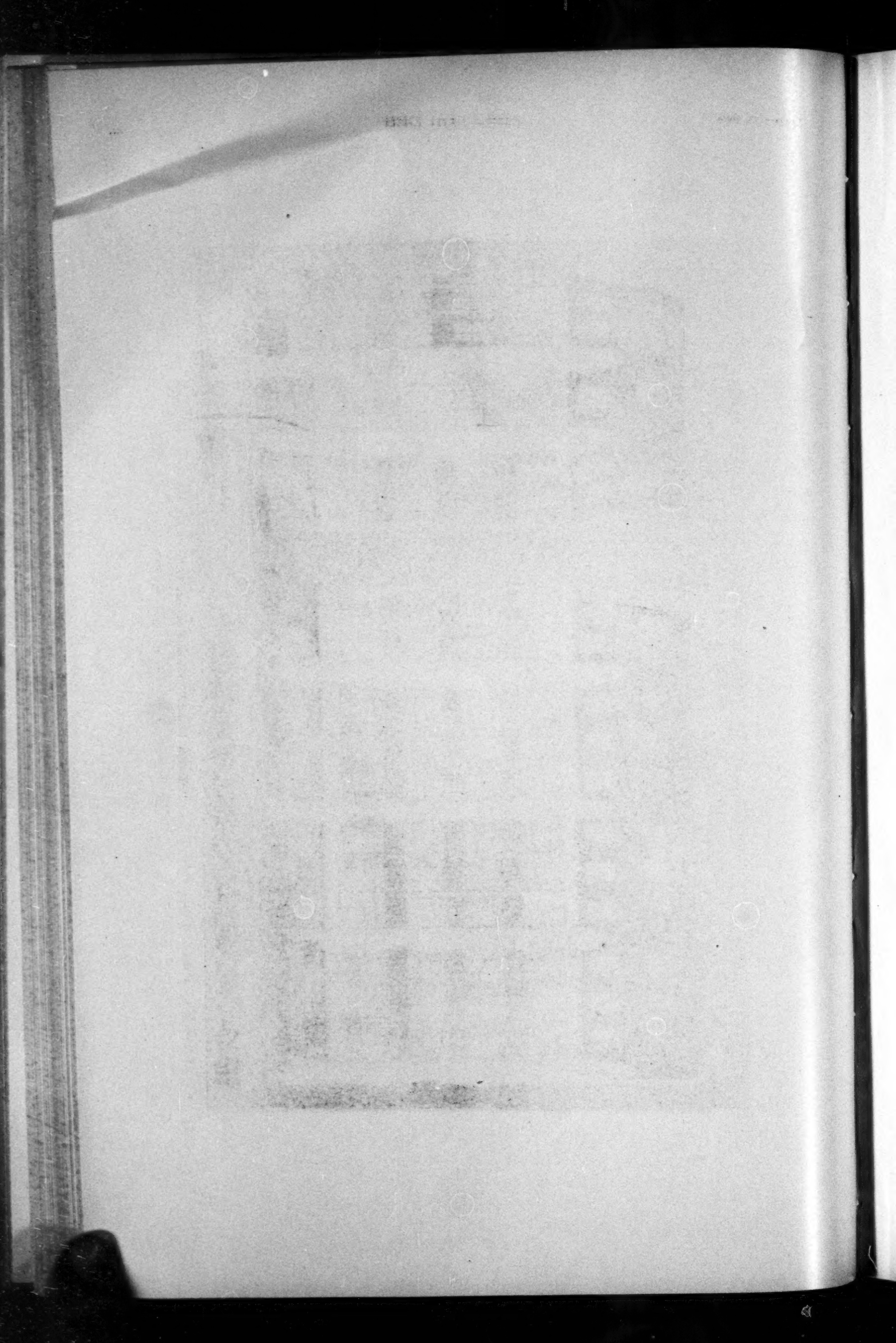
"Axholme," Noctorum, Cheshire.

MR. GILBERT FRASER, F.R.I.B.A., Architect.



"Warner House," Wardour Street, W.

Mr. James J. S. Naylor, F.R.I.B.A., Architect.

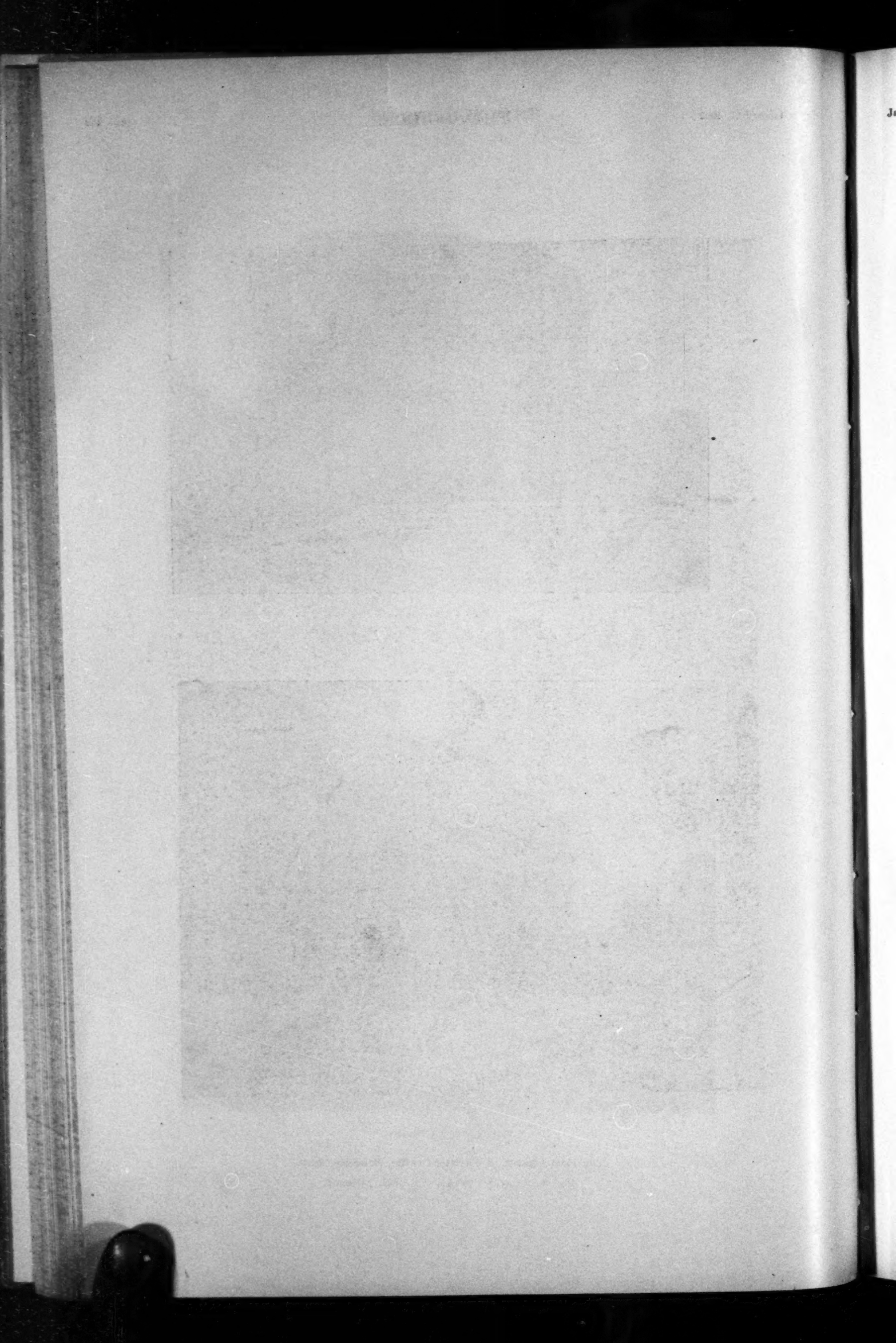


Main Front View.

Main Entrance Portico.

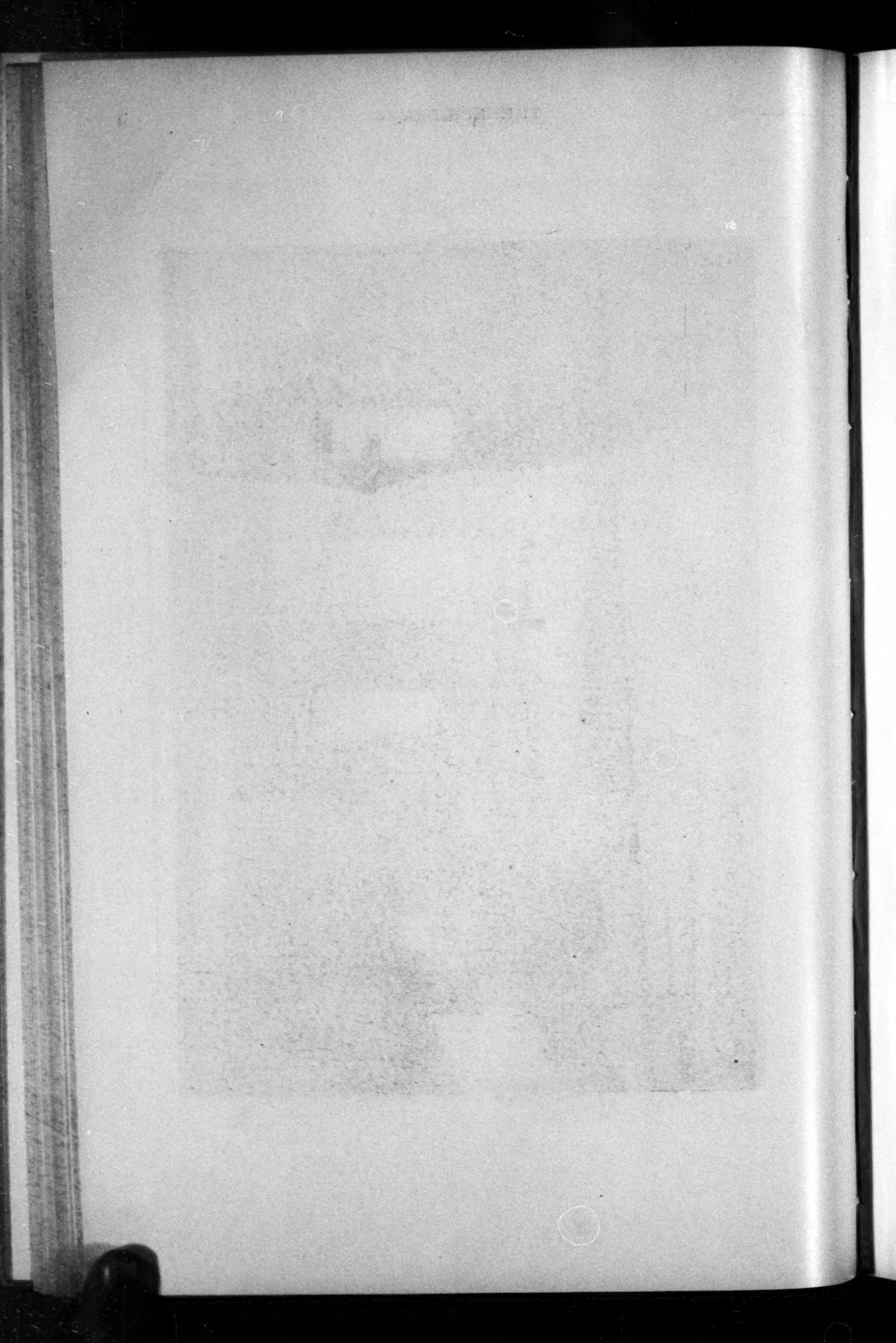
The First Church of Christ Scientist, Bromley, Kent.

Mr. W. Braxton Sinclair, F.R.I.B.A., Architect.



The First Church of Christ Scientist, Bromley, Kent: Auditorium (unfinished but for ceiling and cornice).

Mr. W. Braxton Sinclair, F.R.I.B.A., Architect.

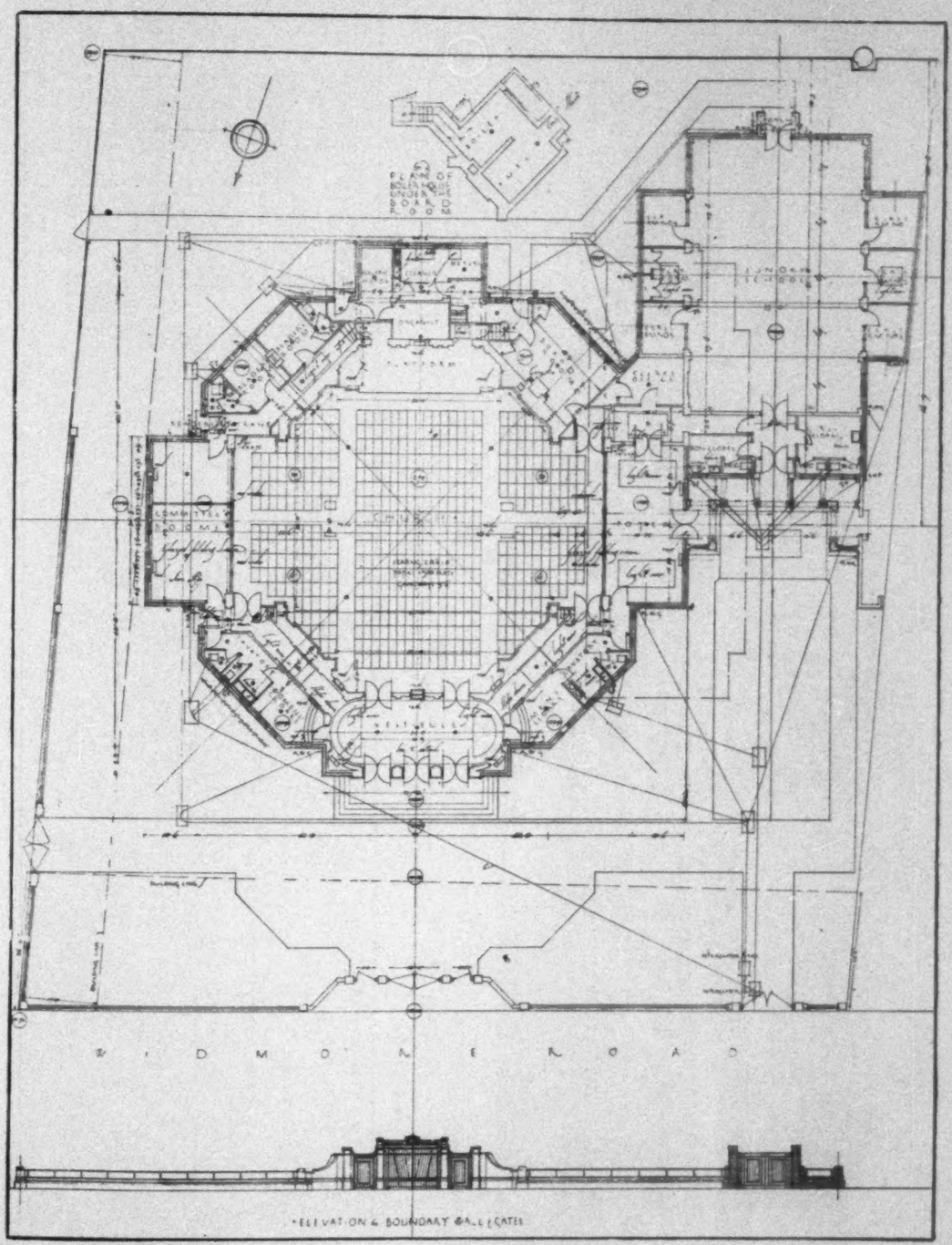


THE VESTIBULE.

DETAIL OF VESTIBULE ENTRANCE DOORS.

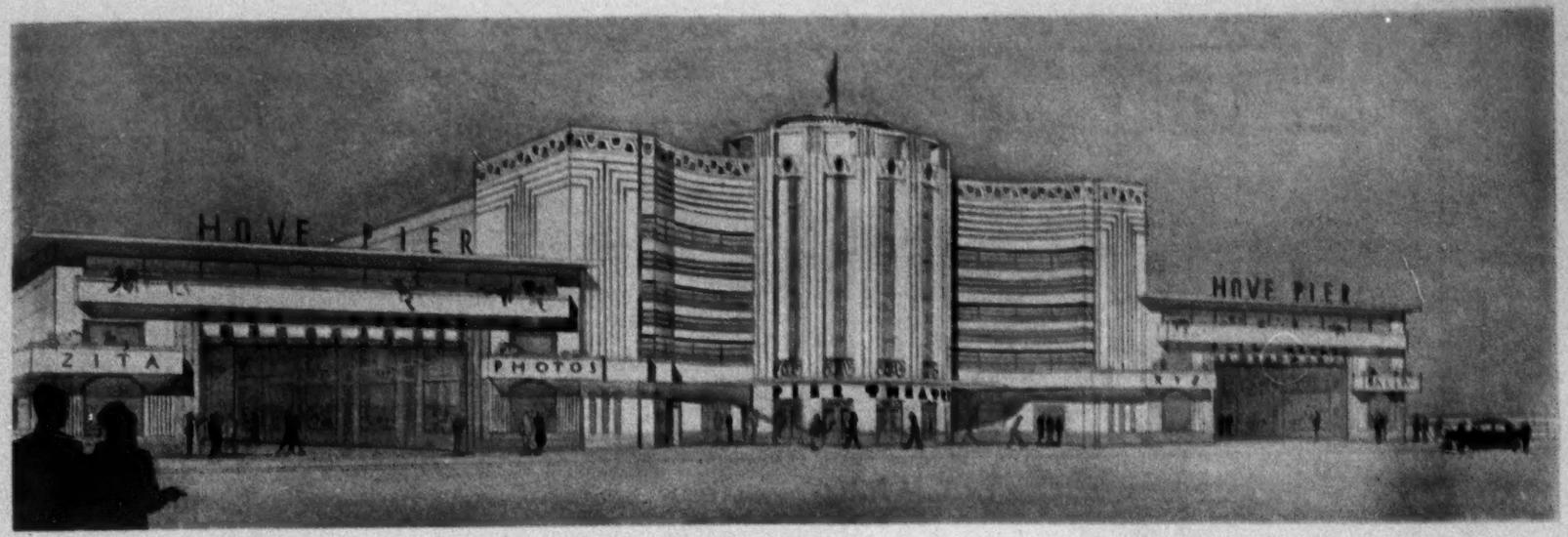
The First Church of Christ Scientist, Bromley, Kent.

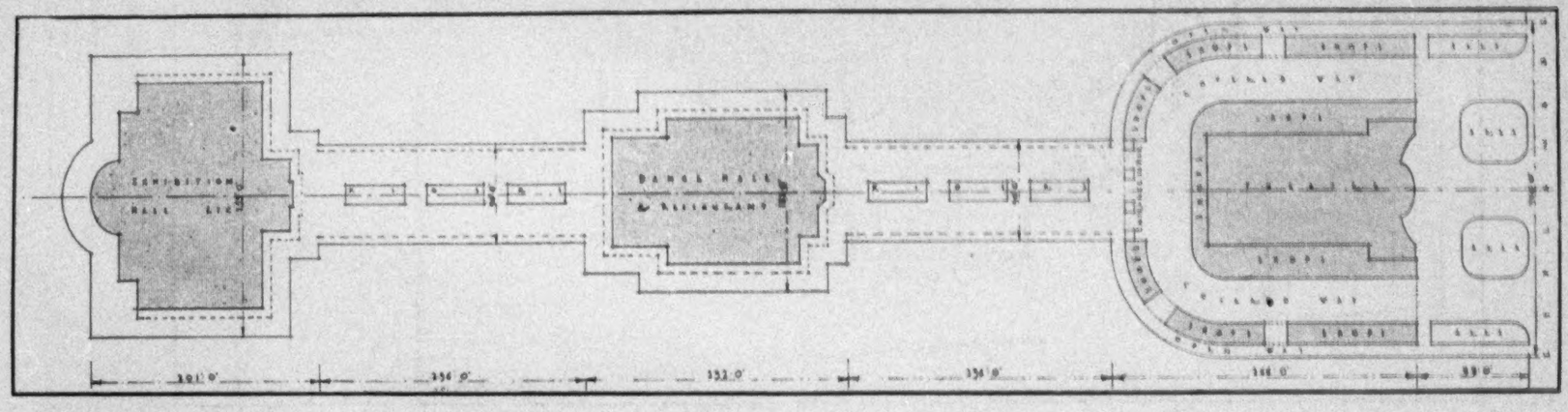
MR. W. BRAXTON SINCLAIR, F.R.I.B.A., Architect.



The First Church of Christ Scientist, Bromley, Kent.

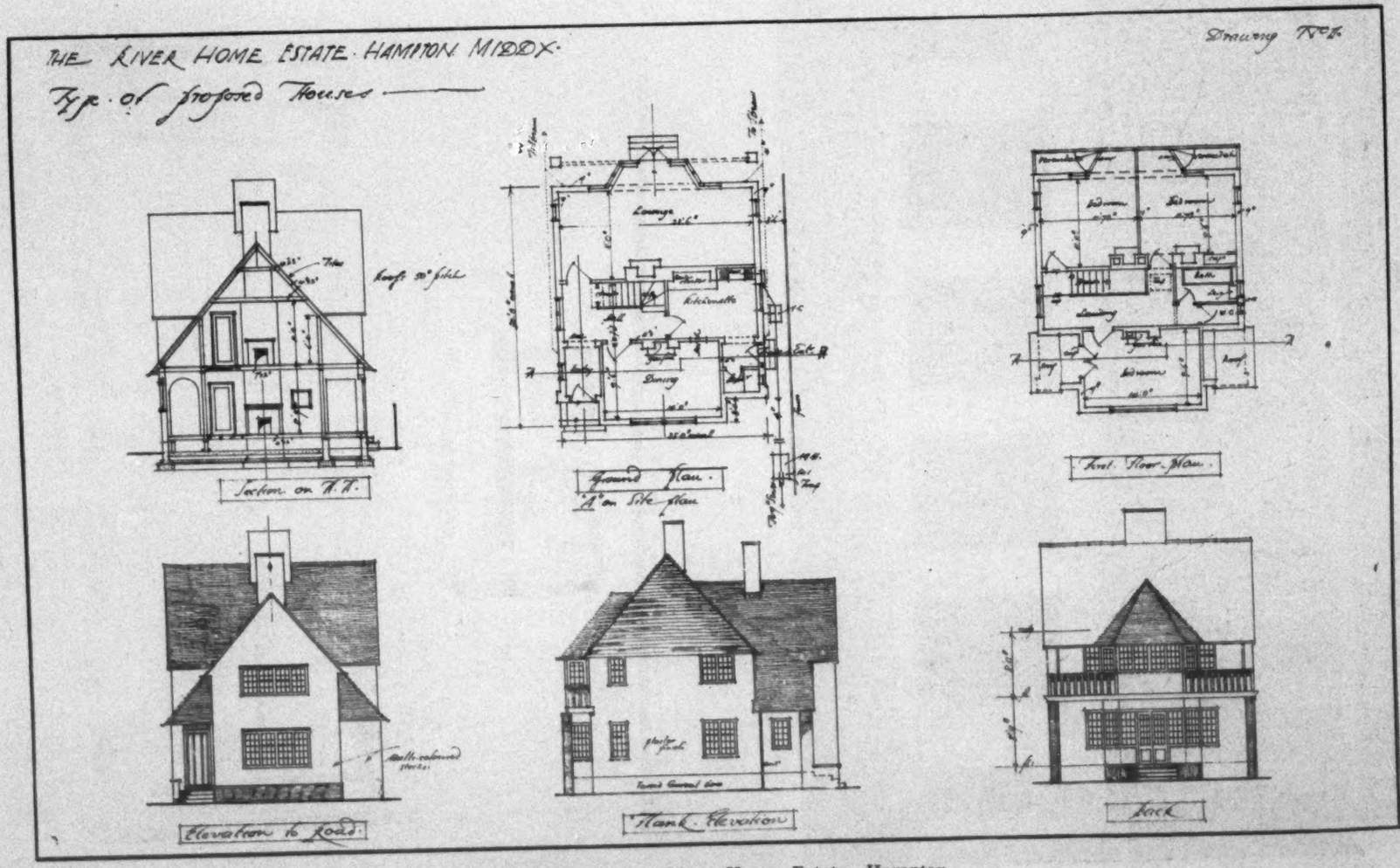
MR. W. BRAXTON SINCLAIR, F.R.I.B.A., Architect.





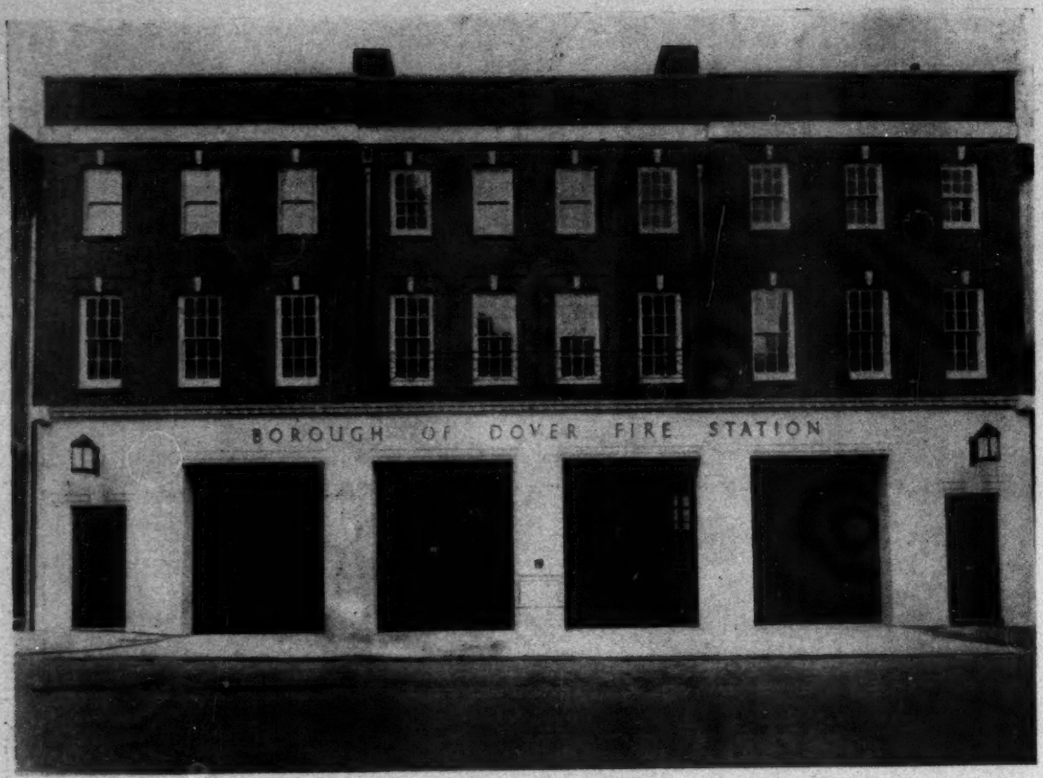
Proposed Scheme for Pier and Amusement Centre, Hove.

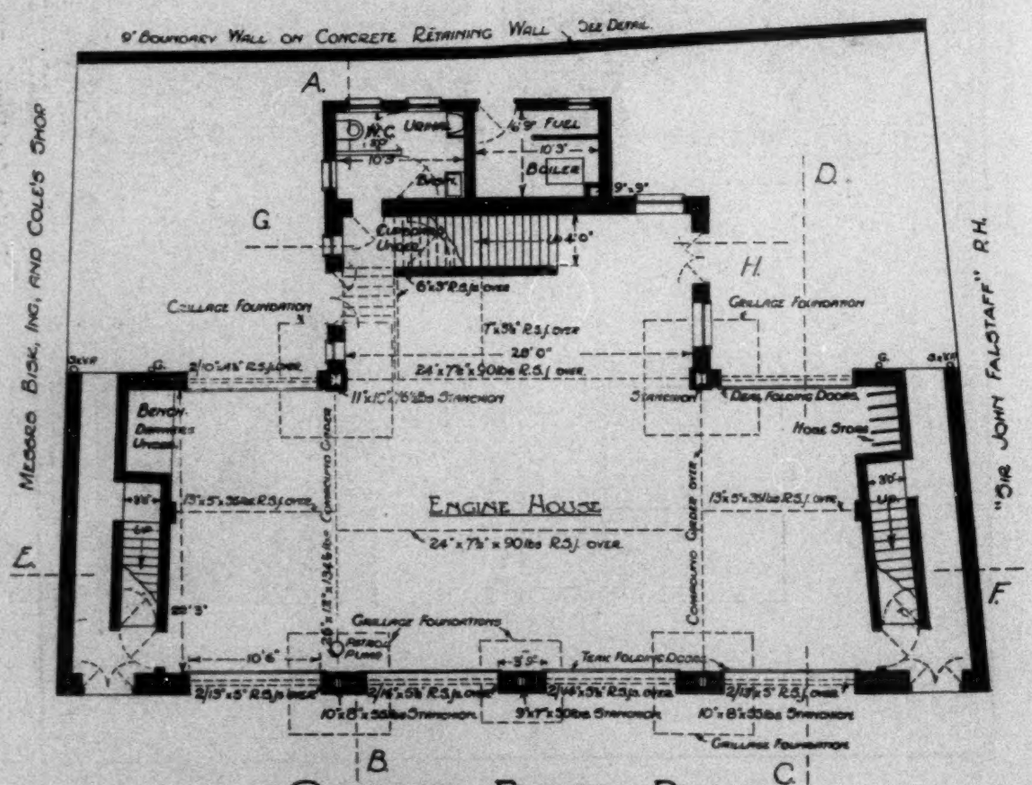
Messrs. Oliver and Roberts, Engineers and Architects; Mr. A. W. Moore, F.R.I.B.A., Consultant Architect.



Design for House, River Home Estate, Hampton.

MR. T. FRANK HAWKES, F.R.I.B.A., Architect.





New Fire Station for the Dover Corporation.

Mr. Wm. Boulton Smith, M.Sc. (Eng.), M.Inst.C.E., Borough Engineer and Surveyor.

HOUSING STANDARDS IN THE U.S.A.

As a result of the conference held at Washington last month on the invitation of the President of the United States, over 3,700 persons deliberated on the housing problem. The conclusions reached on the controversial question of housing standards are of special interest in this country at the present time, when the whole question of standards of houses built with the aid of subsidies out of public funds is under the consideration of the Ministry of Health. Although, of course, due allowance must be made for the different conditions which prevail in the United States as compared with this country, the following recommendations made by the Committee appointed to consider the design and construction of the American homes of the future are of interest to British architects and builders.

The recommendations are taken from the report of the "Correlating Committee on Standards and Objectives," of which Mr. Lawrence Veiller, who is so well known in Great Britain, was Chairman. The following are some of the more important recommendations:—

There should be free movement of air throughout the house. Every room should have adequate natural ventilation. Cross or through ventilation should be had, either by placing windows on two sides of each room or by having doors or transoms so placed in line with windows that there will be a moving current of air.

Where houses are built from identical plans, individuality can often be secured through planting and through the use of window-boxes, porch and garden furniture, etc. If outdoor space for drying clothes is provided, it should be properly screened so as not to render the neighbourhood unattractive. Ugliness, excessive ornamentation, and unpleasant colour combinations should be avoided. The best effects, ordinarily, are secured through simplicity in the architecture. Paint and wall coverings should, in both colour and texture, be cheerful and attractive and not over-stimulating.

The desirable built-in equipment includes kitchen cupboards, preferably flanking the sink, built-in ironing-boards, a passway between kitchen and dining-room, china closets, bookshelves, window seats with storage space underneath, shelves and drawers in linen closets, rods for clothes hangers in clothes closets, low drawers, cupboards and hooks for children's toys or other possessions in the playrooms or in the children's bedrooms—all of which should be planned with reference to convenience in use. Where feasible, there should be an open fireplace in the living-room. An open fire adds cheer.

Floors should be strong, smooth, tight and level, comfortable to stand and walk on, durable and easily cared for. In colour, design and finish they should harmonise with the rest of the room. They may be of wood, cement, tile, linoleum, cork or other composition, according to the purpose to be served. If of wood, the boards should be well matched hardwood, preferably quarter sawn. Tile should be laid on cement. Linoleum should be cemented to the floor over a layer of felt.

The kitchen should be easy of access to the dining-room and preferably compact and rectangular in shape. The kitchen should be so designed, and its equipment and furniture so arranged, as to avoid lost motions, to save unnecessary steps, to "take the walking out of cooking." There should be a "circular work centre" from which most of the operations of preparing food can be carried on without change of location. Working equipment should be so placed as to avoid unnecessary stretching or stooping. The levels of all working spaces, as well as the height of stools and chairs, should be adjusted to the height of the worker. Up and down steps to other floor levels on the same story should be avoided. The larger built-in equipment should be grouped according to its use and arranged along the walls in a nearly continuous working surface.

American tenements are very much more prehistoric in lighting and ventilation than English tenements. Indeed, thousands of rooms in New York to which the sun and fresh air have no direct access would have been condemned years ago by any English Medical Officer of Health.

That there may be adequate light, no multiple-dwelling should be built more than two rooms in depth. There should be no courts or light shafts. Rooms should open only on the street or on large yards or gardens, with no opposite wall a nearer distance than the height of the building.

Each room should have at least one window, preferably two or more, opening directly on a permanent open space sufficient in size to admit adequate light and sunshine. The total window space should not be less than 15 sq. ft. in area. Windows should be so constructed that they can be opened either throughout all of their area or at both top and bottom.

Premises at West Wickham, Kent.

MR. ARNOLD F. HOOPER, F.S.I., A.R.I.B.A. (MESSRS. BELFRAGE, SAVILLE & HOOPER), Architect.

CONCRETE SURFACE TREATMENT

Since an interest has been taken in the appearance of concrete, great strides have been made in developing methods of producing concrete surfaces that are pleasant to the eye and obviate any necessity for covering concrete with another material, as is so often done for æsthetic reasons. A realisation of the fact that it is not sound economics to cover one of the most weather-resisting of all building materials with a material which more readily disintegrates with exposure has led architects and engineers to take a real interest in the various methods by which this use of added materials can be avoided. The methods range from the simple process of cleaning down concrete surfaces to give a presentable appearance to buildings of the factory and warehouse type to the production of finishes that cannot be distinguished from natural stone.

This is perhaps a natural outcome of the desire on the part of the architect to express on the surface of a building the materials of which it is made. Concrete as it leaves the forms has a film of cement on the surface, and, so far as the eye can ascertain, the structure is built of cement alone. But the cement content is perhaps only one-fifth or one-sixth of the materials of which the concrete is made, and a more true impression of the material is gained if the nature of all the constituent parts is shown on the surface. The idea of the exposed-aggregate surface, then, is to obtain on the surface a texture similar to that which would be seen if the film of cement were removed from the concrete, and the desired effect may be obtained in several ways.

The simplest method is to scrub off the cement film with a stiff brush and clean water, but this will only be effective if the scrubbing can be done before the cement has hardened. If applied too early after placing the concrete the brush will loosen the aggregate from the surface, and this is to be avoided. On the other hand, after the cement has hardened it is impossible to remove the cement by this means. No exact period can be laid down for carrying out the process, as the consistency of the mix, the curing conditions, and other factors affect the period which concrete requires to harden, but the scrubbing should be done as soon as possible after the concrete has been placed. By trying the effect of the brush on a small portion of concrete it can readily be ascertained whether it is hard enough to withstand hard scrubbing without disturbing the aggregate; as soon as this can be done the work should be carried out, as if it is left too long the cement cannot be removed at all with water only. This method is obviously only applicable to concrete that can be released from its mould, or from which the shuttering can be stripped, at an early age. Where this is not possible scrubbing with clean water is not sufficient, but a solution of muriatic acid will be effective. The solution should be no stronger than is necessary, and a mix of 1 part muriatic acid to 6 parts water should first be tried. If this is not effective the solution can be strengthened until the cement comes away with reasonable effort.

When coarse aggregate is to be exposed by wire brushing the concrete should be as green as possible, usually not over 48 hours old. Generally speaking, this process is not used on large buildings unless special effects are to be obtained, in which case the treatment, if it is to be successful, requires careful preparation and selection of aggregates, as well as care in concreting. When bush-hammering or other tooling treatment is to be used, attention should be given to the layout of construction joints. The work should be planned to eliminate as many joints as possible, particularly horizontal lines. If the latter are unavoidable, care should be taken to level the concrete before leaving off work.

Where coarse aggregate is to be exposed by picking or hammering, it should be uniformly graded. The distribution of the aggregate should also be uniform for satisfactory results, and the consistency of the mix should therefore be carefully controlled in order to prevent the settling or segregation of aggregate. Surfaces to be finished with a rough texture should be at least two weeks old before finishing. The work may be executed by mechanical devices operated by air or electricity, or by hand-hammering. In general the work on any one panel or area should be done by the same operator in order to avoid differences in texture.

These methods of tooling apply to concrete in which ordinary ballast aggregate is used as well as to concrete made with selected natural stone and selected sand as the aggregate, the colour of the finished wall depending, of course, on the colour of the aggregate. If a special aggregate is used economy may be effected by using it for the face only, using ballast concrete for the greater part of the thickness of the wall. In this method the centering for the concrete is constructed in the ordinary way with the exception of that in contact with the face, which should be erected in not more than 2-ft. lifts and have temporary spacers to keep it 2 in. from the main reinforcement. Special care should be taken with the face timbering to ensure it being cleanly wrought and truly fixed. No. 16 gauge steel plates 2 ft. 6 in. long and about 3 ft. wide may then be placed edge to edge between the face shutter and the reinforcing steel, and lightly wedged up to the latter, leaving a continuous space of about 1½ in. between the plate and the shutter. The special facing concrete is placed first and the ordinary structural concrete afterwards, keeping the latter always 6 in. below the level of the former. As the concretes are poured the steel plates are drawn upwards, allowing the two wet mixtures to flow together, but always keeping at least 3 in. of plate embedded in concrete to form a bottom fixing for subsequent lifts.

Success in obtaining a good face lies in the accurate grading and even mixing of the facing concrete, in placing the concrete in a fairly dry state so that the larger stones do not tend to sink to the bottom, in even tamping in small lifts, and in removing any scum which may rise to the top at the completion of each 2-ft. lift, or particularly at the end of each day's work. The first layer after a stop should be placed slightly wetter and very thoroughly tamped. The face centering should be removed as early as possible, and the concrete finished with a wire brush to the desired texture. If any blemishes occur they should be filled immediately after the concrete is brushed with the screenings from the dry concrete according to the gauge required.

When coloured effects are desired, the selection of colour will generally depend upon the colour of the aggregates available locally, and the cement must be coloured to the same shade. For certain of the darker shades of stone ordinary grey Portland cement is suitable; it is useful to note that the product of one cement factory is sometimes lighter than that from another works, so that the cement manufacturers can often help by supplying a light shade of ordinary cement if they are asked to do so. Cost may also be kept down by mixing white and ordinary Portland cements when pure white is not necessary; mixing ordinary and white Portland cements has no effect on the resultant strength. A portion of hydrated lime also lightens the shade, but it must be remembered that lime is a diluent which adds nothing to the strength of the concrete; if it is used it must be an addition to the cement content, and not take the place of a proportion of cement. An excess of lime will have a weakening effect, and it is not advisable to use lime in excess of 10 per cent. of the cement content.

As different colours vary so much in shade it would serve no useful purpose to give definite proportions of colouring materials and cement to produce given colours, but the following guide will be useful; variations may be obtained by trial and altering proportions until a satisfactory shade is produced :—

Buff and yellow—yellow ochre or barium chromate.

Grey and slate—manganese black or Germantown lampblack (ordinary lampblack is unsatisfactory).

Brown—burnt umber or brown oxide of iron.

Blue—Prussian blue or ultramarine.

Green—green oxide of chromium or greenish blue ultramarine. Green also results from a mixture of yellow ochre and ultramarine.

Pink or red—red oxide of iron, or crimson lake with alumina base.

Chocolate—manganese black, black oxide of iron or copper, and red oxide of iron, mixed together.

Black—manganese black or Germantown lampblack.

By experiment it will be found that mixtures of these materials will produce any desired shade. For the darker shades ordinary grey Portland cement will give good results, but, as stated, white cement must be used for the lighter tints. The colour is supplied in the form of powder, and this is thoroughly mixed with the cement in its dry state in order to ensure that it will be uniformly distributed throughout the concrete, the coloured cement being afterwards added to the aggregate and again thoroughly mixed before water is added. If colour mixing is carried on to any considerable extent it will probably pay to instal a ball-mixer, which grinds the cement and colour together and ensures thorough distribution, while the leading cement manufacturers now supply ready coloured cements in which the colour is ground into the cement under scientific factory control.

The latest development in coloured concrete is the use of a compressor to spray coloured cement on to walls or other surfaces. The coloured cement is forced on at a pressure of about 80 lb., and about 2 lb. of cement will cover one square yard to a depth of 1/16th inch. This process is being used for lining the walls of the new Mersey Tunnel, and other important works.

EDINBURGH BUILDING DINNER

The diamond jubilee dinner of the Edinburgh, Leith, and District Building Trades Association was held in the North British Station Hotel, when Mr. Thomas Graham, F.I.O.B., presided over a company of 100 gentlemen. Among those present were Sir Patrick Ford, M.P., and Lord Dean of Guild T. F. Maclennan, F.R.I.B.A.

Mr. James Philip proposed, "The Corporation of the City of Edinburgh," and Lord Dean of Guild Maclennan, in reply, referred to the flood-lighting of the Castle, and said that it was entirely a worth-while project to flood-light the Castle, and he had no hesitation in saying so. As a business proposition, too, it was worth while for the city of Edinburgh.

Sir Patrick Ford, in proposing the toast of "Edinburgh, Leith and District Building Trades' Association," said that the Association had taken an important part in all matters connected with the building trade in Scotland. The country was suffering from world-depression, but their undue depression in this country was owing to the false policies of the past.

The Chairman, in reply, spoke of the friendship and co-ordination that the Association promoted, and said that it was a great regret that the plumbers had not seen their way to join but that might come along some day. The Association believed that they could be of considerable assistance to the Housing Committee of the Town Council, and they suggested a scheme whereby the Association would take contracts for housing schemes and distribute them among their members. That would have had the effect of providing work for small contractors, who were in need of work, and who were unable to go in for a whole contract for, say, 200 houses, and it would have provided work for local operatives.

SOCIETIES AND INSTITUTIONS

MANCHESTER ARCHITECTS.

The third sessional meeting of the Manchester Society of Architects was held at the Society's rooms on January 13, when a paper was read by Mr. Joseph Emberton, A.R.I.B.A., on "Rational Architecture."

Mr. Emberton contended that the by-laws which restrict our building operations and the materials and ideas which still govern building design, are largely out of date. Present economic conditions, he said, necessitate our making greater use of the new materials which scientific thought has prepared for us, and will effect a great saving in the cost of buildings and free them from much superfluous material. The use of brickwork as a walling material in a steel-framed building is entirely out of date, and he instanced that glass, which is one of the most perfect of weather-resisting materials, backed by cork, which is an efficient insulating material, could be substituted for fourteen-inch brick walls, and in a total thickness of 2½ in. would provide a greater degree of insulation than four 14 in. walls. The lecturer strongly advocated high buildings, the restriction of which he described as a survival of a period when no efficient vertical transport was available, resulting in the development of uneconomic and unhealthy buildings. He contended that the greater area of ground remaining unbuilt upon, consequent upon the greater height of the buildings would go far to solve the traffic problem, as well as to provide more airy streets, and that the resulting effect of large isolated towers, with adequate space around them, would be more satisfactory architecturally than the present system of continuous street frontages, and would allow the architect to design an individual building without it clashing with its neighbour. This system, if applied to domestic buildings, would supplant the cottage, which is an out-of-date unit for human habitation, whose production in such prolific quantities was an uneconomic form of building involving an extravagant waste of countryside. High blocks of flats designed on the same principles as the tower of the Underground headquarters at Westminster would provide much more airy habitations, having unrestricted views over the countryside which could be utilised for agriculture, playing fields and public gardens.

The lecturer suggested an approach to the problems of design from a functional point of view, and demonstrated the waste of light and air and the general extravagance of much of the building of the last twenty years. He claimed that the Gothic builders of the earlier period designed their cathedrals from the functional aspect, and that only when they had gone as far as they could in this direction did they occupy themselves with such ornament as is seen in Henry VII.'s Chapel at Westminster. He was unwilling to concede, however, that Renaissance buildings, such as Somerset House, were adequate office buildings for the housing of Inland Revenue staffs.

Mr. J. L. Gleave proposed, and Mr. P. G. Fairhurst seconded, a vote of thanks.

THE COLLEGE OF ESTATE MANAGEMENT.

In the second of two lectures at the College of Estate Management, Lincoln's Inn Fields, on January 12, Mr. W. T. Creswell, barrister-at-law, spoke on the agency of the auctioneer and surveyor, and said that custom had a great deal to do with the question of agency, first, as to what were the duties of the particular professional man or auctioneer acting as agent in respect to the matter dealt with for his principal. Custom had gradually developed till it was now sometimes difficult to determine, in some professions, what a particular agent could not do. There were many surveyors who considered themselves almost almighty in respect to what they could do when property was put under their hands by a would-be vendor. Actually, all who acted as agents were only entitled to do what was within the scope of their authority. It was necessary, first, to decide what was implied, and, next, what was the custom in the particular profession. As in the case of all agents, the auctioneer could be made responsible to his principal, although, generally speaking, the principal was bound by the agent's acts so long as they were within the scope of his authority, and sometimes when those acts amounted to fraud, if the principal benefited by the fraud or ratified what his agent had done. The one thing an agent had to fear was the charge of negligence. A surveyor should hesitate before putting at the bottom of his valuation the words "I value." Negligence would lie against him or any other agent who had not used that care, skill and diligence usual in the profession to which he belonged. Generally speaking, auctioneers and surveyors had no right to delegate their authority. They entered into a personal contract, which ceased in certain circumstances, such as death, and, in most cases, when bankruptcy occurred. The person who made as well as signed the valuation must be the valuer.

Although an auctioneer was allowed to do a great deal of "puffing up" of a particular property, there was a limit to that, especially if he gave any definite warranty as to title and the condition of the property. In that case he might render himself liable to the purchaser for breach of warranty of authority. The agency of an auctioneer terminated immediately he had knocked down to the highest bidder the particular thing he was selling, except that he was still in a position to sign the memorandum or the contract. An auctioneer was not entitled to conclude a sale by private treaty, but it was well-known that on introducing a purchaser privately an auctioneer was entitled to claim remuneration, and in that connection many cases had arisen because of the difficulty that arose of deciding who was entitled to remuneration.

BIRMINGHAM ARCHITECTURAL ASSOCIATION.

A paper on "British War Cemeteries and Memorials in France, Flanders and Italy," was read by Lt.-Col. H. P. Cart de Lafontaine, A.R.I.B.A. (sometime "Inspector of Works," I.W.G.C. France and Flanders), before this Association on January 8.

The work, said the lecturer, was world-wide, while the difficulties which had to be overcome and the special conditions which affected design and construction in each area were extraordinarily varied. He would therefore limit his remarks to France and Flanders, of which area he had had personal experience, with a few words about the cemeteries and memorials in Italy.

After giving some description of the organisation by Sir Fabian (then Major) Ware, of the Directorate of Graves Registration, the lecturer said that the Imperial War Graves Commission started work in France with a staff of four or five officers and about half a dozen clerks and typists to deal with the problem of design and permanent construction of some 2,500 cemeteries and cemetery extensions. The I.W.G.C. in France was divided into two parts, one Administrative and the other the Works branch. The latter included the architects' branch, with its staff of architects, surveyors, quantity surveyors, draughtsmen and clerks; the horticultural branch and a land and legal branch, which dealt with questions of the acquisition of land for cemeteries and memorials. The architects' branch at headquarters was divided into three groups of six architects and their draughtsmen, each under the direction, in questions of design, of one of the Commission's Principal Architects, Sir Reginald Blomfield, R.A., Sir Edwin Lutyens, R.A., and Sir Herbert Baker, A.R.A. Later, a fourth group was added under Major Charles Holden. The British war area in France and Belgium was divided into five main areas, which were subdivided into some seventy-five sub-areas. Before any designs could be prepared for the cemeteries in these areas it had to be made certain (a) that the cemetery was closed; (b) that the records were complete; (c) that the land, including approaches, had been acquired; (d) that access was possible. When all these points had been settled the architects inspected the site, usually in company with their own principal architect during one of his frequent visits to France, and the work of preparing designs began. Two other points which affected design were cost and the elimination of all materials, such as wood, iron guttering, paintwork and the like, which could not be considered as being permanent. It was also necessary to eliminate any suggestion of "style" and to reduce moulded work and ornament to the minimum. The cost was based on a fixed amount per grave, which included the provision and fixing of the headstones, etc.; the amount so allowed was in no case to exceed £10 per grave. Designs and estimates were prepared by the architects and quantity surveyors in France under the direction of their own principal architect and were sent to London for his inspection and approval; when so approved they went for final approval to the Commission's adviser, Sir Frederick Kenyon.

Then came the complicated business of construction in a foreign and war-devastated land, with railways torn up and roads battered by shelling, made even more difficult in some cases by the fact that cemeteries had been fought over and bombarded more than once. Quarries had to be inspected in various parts of France and Belgium, arrangements for import licences had to be made with the Customs officials, special foundations and methods of construction had to be considered where trenches and "dugouts" were found, and the various alternatives for carrying out construction had to be elaborated; direct labour, French contractors or British builders, etc., were some of the alternatives considered. It was finally decided that (except in some special cases) tenders should be invited in the ordinary way for two reasons, economy and speed.

The lecturer mentioned a small detail of construction which had done more to give the special character to the war cemeteries than any other. That was the method evolved to ensure that the headstones should remain vertical and not sag and tilt at all sorts of angles. The method adopted was to construct a reinforced concrete beam with flanges at fixed intervals projecting alternately from each side. Along the entire length of the upper side ran a groove, some 3 in. wide by about 6 in. deep, into which the base of each headstone was set and grouted in cement, while the remaining portion of the groove was also filled in with cement concrete. That method had proved satisfactory and no case of tilting of the headstones had been recorded. As to the headstones themselves, it was finally settled that each grave should be marked with a uniform type of headstone.

On the subject of the memorials, the National Battlefields Memorial Committee recommended that a Memorial for Flanders should be at the Menin Gate, Ypres, that a Central Memorial in France should be at Amiens, and that another should be on the Marne at La Ferté sous Jouarre. It was also recommended that memorial tablets should be placed in a number of French and Belgian Cathedrals. These recommendations were later extended and a number of memorials which also commemorated the many thousands "who had no known grave" were erected.

In Italy the work was comparatively simple. The organisation was very much the same as in France, and the chief difficulty lay in the permanent construction of the cemeteries of the Asiago Plateau, some 4,000 ft. above sea level, with no roads or machinery available. Here Sir Robert Lorimer, the principal architect for Italy, worked with the local material, a marble rubble, in such a way as to give the impression of solidity and rugged simplicity which well fitted the towering rocks and snowy peaks of the mountain barrier where these soldiers had fought and died. In Italy there were some 93 cemeteries, of which five were on the Asiago Plateau.

ERRORS IN BILLS OF QUANTITIES

By W. T. CRESWELL, Barrister-at-Law, Hon. A.R.I.B.A., A.S.I.

WHERE, under the contract, bills of quantities are made part of the contract, there is usually provision made for the adjustment of errors in the bills of quantities. The new form of building contract provides, amongst other things, that the quantity of the work comprised in the contract is deemed to be that which is set out in the bills of quantities; and that any errors in description, or in quantity, or any omissions of items occurring therein, do not vitiate the contract, but are to be treated as extras or variations or omissions, as the case may be; and the value thereof added to, or deducted from, the contract sum, in the adjustment of accounts.

Quantities not Guaranteed.

Now, let it be clearly understood that *in general* there is *no guarantee* that bills of quantities, whether prepared by the architect himself, or by a quantity surveyor, are in fact accurate. And, therefore, if they are found by the contractor to be inaccurate and to his disinterest he has *no remedy* either against the employer or the person who has prepared them, for breach of warranty, unless he can prove that their accuracy has been guaranteed by either of these persons, or that the person who prepared them has been *fraudulent* in "taking off" the quantities "short," and that *the employer knew of it*, and has ratified what has been done in order to obtain a low tender from the contractors by fraud.

It may, however, also be stated that, in a lump-sum contract, the amount of work to be done is defined by the bills of quantities *if they form part of the contract*; and that if there is any extra work necessarily done in relation to the actual contract, in order to complete the work contemplated by the contract, then the contractor is entitled to be allowed an "extra" for it. (See Patman and Fotheringham *v.* Pilditch (1904), 2 H.B.C., 4th ed. : 368, and Meigh and Green *v.* Stockingford Colliery Co., Ltd. (1922), H.B.C., 5th ed. : 336.)

"Lump Sum" Contracts—Measuring Errors.

In a "lump sum" contract, that is to say, in a contract where the price is fixed to include the whole work; and where special provisions are made for any additions or deductions to be measured and valued (as in the new form of contract to which we have already referred), then, at the adjustment of accounts, *only such work as has been affected* (by, for instance, such errors in the bills of quantities) can be remeasured. The measurer is not entitled to remeasure the *whole of the work* with the purpose of setting against the quantities which have been taken "short" or "lean," those quantities which were originally taken "fat." And, in this respect, it does not signify in whose interest the measurer may be acting; neither the employer nor the contractor can remeasure the whole work for any reason of this kind. If he does so, then he thereby sets aside the "lump sum" contract, introduces and establishes, by implication, a "measurement and value" contract; and, consequently, the bills of quantities degrade to a mere schedule of prices. (See London Steam Stone Saw Mills *v.* Lorden (1900), 2 H.B.C., 301; Wallace *v.* Douglas (1906), C.B.C., 2nd ed., 57, and Mitchell *v.* Magistrates of Dalkeith (1930), S.L.T., 80).

It should, therefore, be clearly understood that, where errors appear in bills of quantities they are adjustable only in the manner indicated, whether the result is in favour of the employer and against the contractor, or vice-versa; that is to say, the employer, of course, is as much entitled to an adjustment for errors in bills of quantities as is the contractor.

ILLUSTRATIONS

(*Continued from page* 178.)

centre of the pier a building will be erected for use as a concert hall, ballroom and large public restaurant, equipped with a modern kitchen. There will also be buffets and refreshment bars fitted throughout. The amusement or exhibition hall will be erected at the end of the pier, size approximately 250 ft. by 210 ft. The engineers and architects are Messrs. Oliver and Roberts, 6, Broad-street-place, E.C.2, the consulting architect Mr. A. W. Moore, F.R.I.B.A., 124, Fenchurch-street, E.C.2, the quantity surveyors Messrs. Widnell and Trollope, Broadway-court, Broadway, S.W.1, and reinforced concrete engineers the Trussed Concrete Steel Co., Ltd.

Riverside House, Hampton.

This design is a type of house erected on a small estate on the River Thames. Built with local bricks and roofed with hand-made tiles, the houses were planned to take full advantage of the pleasant views obtainable from the site. The architect is Mr. T. Frank Hawkes, F.R.I.B.A.

New Fire Station, Dover.

This consists on the ground floor of an engine-room, measuring 56 ft. by 34 ft., to house two motor-fire-engines, one motor ambulance and a police car, and there is accommodation for additional cars when required. From the back of the engine-room a reinforced concrete staircase leads to an instruction-room, 36 ft. by 28 ft., on the first floor, from which another staircase leads to a similar room on the second floor, which for the present will be used as a store, but later will probably be converted into additional quarters for firemen. The door at each end of the building leads to the rear yard and to a residential flat on two floors.

The brick front is built of 2 in. Old English red facing bricks from Wm. Davis, of Woking, with artificial stone strings and copings from Girling's Ferro-Concrete Co., Ltd., and cement facings coloured to match on the ground floor. The main roof is tiled with Kentish hand-made tiles. The principal contractors were Messrs. Rice and Sons, of London and Margate, and the various subcontractors were as follows:—Redpath, Brown and Co., Ltd., steelwork; Diespeker and Co., Ltd., fireproof floors over engine-room; Eastwoods, Ltd., tiling; W. Hedgecock, Dover, plasterer; Limmer and Trinidad Lake Asphalt Co., Ltd., asphalt roof; J. Gibbons, Ltd., ironmongery; Thos. Try and Son, Ltd., London, quick-opening apparatus for front doors; Doulton and Co., Ltd., sanitary fittings; Hollis, Bros. and Co., Ltd., wood block flooring; Bayliss, Jones and Bayliss, wrought iron balcony; Wm. Freer, Ltd., London, central heating; Walter Macfarlane and Co., rainwater goods; Edward Wright, Dover, electric lighting and fire alarms; and Edison Swan Electric Co., Ltd., ornamental lamps.

The building was designed by the Borough Engineer and Surveyor, Mr. Wm. Boulton Smith, M.Sc.(Eng.), M.Inst.C.E., and the work was carried through by Mr. L. E. L. Jones, Architectural Assistant.

Premises, West Wickham, Kent.

These premises, for Messrs. J. Sainsbury, are situated at the end of a new terrace of shops in the High-street, flanking upon the Grove. The illustration shows the return flank to the Grove. The premises comprise basement, the full length of building, ground-floor shop, and three stories over, dwelling accommodation for staff. The general walling brick is High Brooms, with Thos. Lawrence's (Bracknell) red brick facings; there is copper covering to spandril to bays, and stone corbels supplied by the Patent Impervious Stone and Construction Co., Ltd. The roof is covered with Tuckers', Loughborough, tiles. The premises were erected by Messrs. James Smith and Sons (Norwood), Ltd.

Mr. Arnold F. Hooper, F.S.I., A.R.I.B.A., of Messrs. Belfrage, Saville and Hooper, is the architect.

CORRESPONDENCE

(*Continued from page* 173.)

"The Road to Prosperity."

SIR,—In answer to the letter from Messieurs Wallis and Redfern in your issue for January 15, the present industrial and trade troubles go back to a time long before the War; in fact, to the beginning of machine industry and Bank-created "debt" money.

The authors of the book say that "what is deducted from wages would be added to profits, and the demand would remain exactly the same." I do not deny that demand would be even greater than before, for effective demand would be less than before by the amount of the reduction of wages or purchasing power. And even if profits were increased there is no certainty that they would be distributed; indeed, the increase would probably go to build up reserves or to pay off bank loans, and so be destroyed for the time being or for ever.

The authors are trying to set matters right within the bankers' own hopeless artificial limitations. As I understand them, their remedy is to raise prices and reduce incomes, presumably in the hope of selling more goods! It is an old and disproved remedy, as old as machine industry, and it is based on the fallacy that somewhere—unstated—in the world there is more money available for the purchase of goods than was distributed in their making.

The authors have misread Major Douglas; he is not so simple as they suggest, and nothing could be further from the truth than their reading of him. His remedy lies, not in raising prices, but in lowering them down to cost or even lower by means of rightly and accurately used non-debt-incurring national credit; for all credit is nationally created and is represented by book figures, and it belongs to the nation and not exclusively to any privileged section of it. At present all money other than coin "belongs" to banks, and is a "debt" to them.

But banks do not really create credit at all; that is done by the nation at work. Banks are book-keepers, but by a secret process not generally understood they have become "arbiters of industry."

The inclusion of overhead charges in prices is the root cause of the "unsaleable surplus" of goods. The chief overheads are the repayment of bank loans, which come out of nothing and go back into nothingness when repaid out of current prices to consumers. But being repaid once does not mean that they are repaid for good and all; on the contrary, they are added into future prices and have to be paid for all over again in the price of the final product. As shown in my last letter, £100 of bank credit created £300 of prices, and this process may be exaggerated to a far greater proportion in the case of those goods which take a long time and go through many stages in the making.

I think the authors admit that present-day methods—except the crude idea of reducing wages—are out of date; gold is useless, unlimited bank credit is useless, and I agree as to these latter.

Major Douglas's works throw an entirely new light on the whole question, and no banker or other financier has ever attempted publicly to discuss his A + B theorem.

The authors state the case fairly—the problem, at bottom, is to bring about an adjustment between prices and wages. Quite so, but it cannot be done on orthodox bank credit lines. Prices must be made to equate with wages.

As Sir E. Owen Williams asks in a letter to the *Times* of December 8, "Can like be equated to unlike, by any necromancy of gold?" The answer is "No, A is always less than A + B."

ARTHUR WELFORD.

[*** This correspondence could, no doubt, be carried on indefinitely, and as our columns are not the most suitable for such discussion, the correspondence must now cease.—ED.]

LAW REPORTS

CHANCERY DIVISION.
Before MR. JUSTICE LUXMOORE.

RESTRICTIVE COVENANT: QUESTION AS TO FLATS.

The Governors of Alleyn's College *v.* Reed and Others.

THIS was an action by the Governors of Alleyn's College, of Dulwich, against Miss Reed, of Victoria Crescent, Wimbledon, lessee of 37, Alleyn-park, Mrs. A. V. Porter, under-lessee, and other persons who had rented certain flats from Mrs. Porter, to recover possession of the premises.

Miss Reed was assignee of a lease of 37, Alleyn-park, and Mrs. Porter was the assignee of a sub-lease at an increased rent, which she purchased in 1928.

The plaintiffs' case was that the covenants of the lease had been broken by Mrs. Porter turning the house into flats, she agreeing to supply each tenant with hot water and to keep the staircase cleaned. The head lease contained a covenant that the lessee should not convert the premises nor permit the same to be used "for carrying on any trade or business" or "in any way or manner, or for any purpose, that shall or may be deemed by the governors to be an annoyance or inconvenience to the neighbourhood or the public, or the contiguous tenants of the governors." The under-lease repealed that covenant.

The defendants denied that what had been done constituted any breach of covenant.

His lordship held that what Mrs. Porter did constituted a carrying on of a trade or business, and in his opinion there was also a breach of the second part of the covenant with regard to annoyance and inconvenience. The governors, his lordship said, had always resisted attempts to vary the covenants in their leases so as to enable houses in particular parts of the estate to be let out in suites and apartments, and such resistance had been based on the view that it was detrimental to the estate. "Business" was a wide and flexible word, but there was little doubt that the sub-letting of premises in suites, with or without the provision of other service, was a business. He understood there was no objection to granting Miss Reed relief on proper terms.

After discussion it was arranged that the order for possession should not be drawn up until proposals had been made in respect to the relief which the governors were willing to concede, and that if that were not agreed the Court should be asked to give a decision on the point.

CENTRAL CRIMINAL COURT.
Before the RECORDER.

WHAT IS WHITE LEAD?

Rex *v.* Richard Hunecke.

THIS was a prosecution under Section 2 of the Merchandise Marks Act, 1887, in which it was alleged that the defendant, Mr. Richard Hunecke, sold pigment to which a false trade description had been applied. The case, which had been originally tried before the Lord Mayor, was transferred at the defendant's desire to the Central Criminal Court, where the Recorder, in directing the jury to say that the defendant was not guilty, said: "No kind of moral blame attached to Mr. Hunecke. . . . There is no question of fraud under this section at all." In his judgment the Recorder said:—"The thing started by Mr. Hunecke's company advertising Sulfo white lead, and the leaflet said in the plainest terms, 'Sulfo white lead is intended to be sulphate of lead, answering the formulæ given above.' An analysis is given showing that there is 71.1 per cent. of lead sulphate to 27.8 per cent. of lead oxide, and the correspondence with the Prosecution's agent and the invoices show in the clearest terms that Mr. Hunecke makes it apparent that that agent is not buying a basic carbonate, but that he is buying a basic sulphate." The Recorder then drew attention to a letter emanating from the Home Office saying "that there are two methods by which the production of white lead can be free from danger: one is the production of the article as sulphate of lead (which is innocuous) in place of carbonate of lead, and the other is the manufacture of carbonate of lead by mechanical means."

"Next we come," continued the Recorder, "to what at first impressed me enormously, and that is the findings of a very learned committee of experts representing the Government departments and representing the trade and many other well-informed public bodies set up in 1926 to find out what was the British Standard Specification, and that committee says: 'Description: All materials shall consist of hydroxycarbonate of lead, and its composition is to be no more than 80 per cent. and no less than 67 per cent. of normal carbonate of lead.' At first that was an argument that impressed me, but when one comes to look at the Report more carefully one finds that it is only white lead for the purpose of the British Standard Specification, and that all they are saying is that if you buy B.S.S. white lead, then it must be basic carbonate, and the argument from that seems clearly to be that if you do not buy B.S.S. white lead, or if you do not buy any white lead which is specified as basic carbonate, then the vendors are entitled to supply you with basic sulphate if they choose. . . . I take the responsibility for saying that the prosecution have altogether failed to establish the monopoly that the sellers of basic carbonate desire, that is, the monopoly of the term 'white lead,' which, *ex concessi*, is not a chemical term at all. I am not deciding whether the vendors of basic sulphate are entitled to call it white lead or not, but if they will call it by some qualifying phrase, such as to indicate to the purchaser that it is basic sulphate, then I think they are keeping well within the law."

As stated, the jury, without retiring, found Mr. Hunecke not guilty, and the Recorder ordered costs not exceeding £200 to be paid by the prosecutors to Mr. Hunecke.

Sir Arthur Colefax, K.C., and Mr. Weingott appeared for the defendant, instructed by Messrs. Walmsley and Stansbury.

CHANCERY DIVISION.
Before MR. JUSTICE CLAUSON.

ALLEGED CHANGE IN CHARACTER OF PROPERTY AND NEIGHBOURHOOD.

Glover *v.* Official Arbitrator.

THIS matter came before the Court by way of appeal from an order made by the official arbitrator in July, 1931, under Section 84 of the Law of Property Act, 1925, dismissing an application by Mr. H. G. Glover, of 118, Willow-avenue, Edgbaston, Birmingham, for the discharge or modification of certain restrictive covenants to which his premises are subject.

The applicant, who carries on the business of a photographer at 118, Willow-avenue, contended that he should be allowed to continue his business and that the restrictions which prohibited his carrying on the business ought to be discharged or modified by reason of the changes in the character of the property and neighbourhood, which was formerly open country.

Mr. John Wylie, for the applicant, contended that the restrictions impeded the reasonable user of the land for the public or private purposes without securing practical benefits to other persons, and further that the persons entitled to the benefit of the restrictions had agreed, expressly or by implication, to their being discharged. There seemed to be an objection to people carrying on business, but it had been done for years, and applicant had carried on business since 1919 and no serious objection was made till 1929.

Mr. Joy, K.C., in opposition, said the applicant was attempting to perpetuate a breach of covenant which had already been dealt with by the Court Judge who granted an injunction against him. Counsel said this was an entirely residential district. The restrictions had not impeded development, as there were now 316 houses on the estate.

His Lordship dismissed the application with costs, assuming he had jurisdiction to deal with it, though he did not decide the point. In his opinion there was not sufficient evidence for him to hold that this trade restriction had become obsolete, and he therefore agreed with the decision of the arbitrator—a conclusion he would have come to himself.

LABORATORIES:

THEIR PLANNING AND FITTING.*

THE addition of laboratories to our universities, colleges and schools is one of the most—if not the most—important contributions to our educational equipment in recent years. In his valuable introduction to this book, Sir A. E. Shipley attributes the honour of pioneering this change of method of teaching to Roger Bacon. The astronomer ceased to practise astrology, and the chemist and physicist ceased the practice of occultists and necromancy as time passed. The laboratory marks the beginning of the era when men sought to advance knowledge by means of research, as opposed to age-honoured traditions and speculations handed down from generation to generation until they became so sacred in character that Churches punished any critics for calling their accuracy into question! This resort to experiment in the search for truth was the foundation of the scientific method, and the pendulum-swing carried many to take up extreme positions, even leading to the rejection of belief in everything that they could not understand! However, it is not necessary to follow this line of thought now, but rather to direct our readers' attention to Mr. Munby's book on the important problem of laboratory design.

A laboratory is actually only a special form of "study," or a place where many books will be found. The furniture will provide places for pens, ink, paper, notebooks, and drawing paraphernalia, so that the student can record the results of his studies, with the aim of increasing his own knowledge, and, possibly, in the end, to extend the world's knowledge. When experimental work is undertaken, handiwork other than that of wielding a pen has to be performed; hence the study will be furnished with tools, materials, etc., and manual dexterity is required. This type of study is generally known as a laboratory. The author of the book before us has placed on record the results of much experience and special study in the building of laboratories for various purposes, and has made a valuable addition to the somewhat scanty records of this section of our educational facilities.

The author is a well-known architect, but he has not published in this book a single elevation, all the illustrations showing interiors, their arrangements, details of construction, with plans showing the mutual relations of corridors, lecture rooms, etc., as found in our leading universities, colleges, and schools, and this, we believe, is the correct treatment of the subject. To build for convenient use is obviously all-important, but it should also be the aim to add, as far as possible, beauty of outline and details as well, even in such mundane matters as laboratories and studies. The book is one that will repay study by all who desire to obtain the best arrangements for efficient usage. Each subject except engineering is mentioned, and naturally much space is devoted to biological, chemical, and physical laboratories. There is, of course, a wide range of treatment, for it is seldom that two sites are alike, whilst there are special requirements to be met in the equipment in each case in consequence of the character of the work to be done differing from an elementary treatment at one end of the scale to advanced work and research at the other end.

Much space is given to small details, and altogether we cordially commend this book to the attention of all our readers who may be concerned in the building and equipment of laboratories for educational purposes.

* By Alan E. Munby, M.A., F.R.I.B.A., with an historical introduction by Sir Arthur E. Shipley, G.B.E., Sc.D., F.R.S. London: G. Bell and Sons, Ltd., 1931. 30s. net. Revised Edition.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

QUESTIONS.

Linoleum on Concrete.

Sir,—In a building I am erecting, it is proposed to cover large areas of the concrete floors with linoleum. The floors are now ready, but there is no need to lay the linoleum for another 14-16 weeks. If laid then, is there any reason to anticipate trouble from damp, and, if so, what steps should I take in laying to obviate this? Elk.

Brick Tax.

Sir,—Will you kindly inform me when the "Brick Tax" was inaugurated, and for what reason it was made and abolished?

Cecil A. Sharp.

Cavity Work and Lintols.

Sir,—I have a case of rain penetrating through a cavity wall in the soffits and head of a lintol to a window. I have had the head opened up outside and find the brick arch protected with a zinc dampcourse, which is turned up and over the concrete lintol at the back, seeming quite in order. I should be glad of advice. Occupier.

Copper Tubing.

Sir,—I should be grateful of advice as to whether copper tubing for heating and water pipes is now at a price which will compare favourably with other materials, and also as to the best system of jointing same which is available. Heat.

Columbian Pine.

Sir,—Will you advise me as to whether Columbian pine is a suitable timber for structural work in place of fir, and whether it is obtainable at a reasonable price for these purposes, such as floor joists and rafters?

Structure.

Building Lines.

Sir,—I am informed that under the new Town Planning Act a local authority has power to lay down a building line for any road, irrespective of the alignment of any buildings which may at present exist. Can you or any of your readers inform me whether this is correct? Estates

Rural Housing.

Sir,—I understand there was an Act in force some years ago offering a subsidy of £100 for the reconditioning of agricultural workers' dwellings, to be let to genuine agricultural workers. Is this Act still in force, and if so, what authority administers the Act?

Country

ANSWERS.

A Damp Gable.

[Answer to "F. W. S.," January 8.]

Sir,—Solid walls, unless completely waterproofed when constructed, cannot be relied upon to resist driving rain. Several coats of a good quality petrifying liquid will probably effect a cure, though renewal of the treatment will probably be required at five years intervals. Proof.

Combined Sewage System.

[Answer to "Estates," January 15.]

Sir,—If the rural authority concerned has sought and obtained urban powers, as it is entitled to do under the Public Health Act, 1875, then the provisions of that Act apply, and under Section 4 each house or building must have a separate drain, but such drain can communicate direct to one cesspool "or other like receptacle for drainage, as with a sewer into which the drainage of two or more buildings or premises occupied by different persons is conveyed." In these circumstances it seems clear the authority cannot refuse permission to what "Estates" seeks to do. Lex.

Town Planning.

[Answer to "Ratepayer," January 15.]

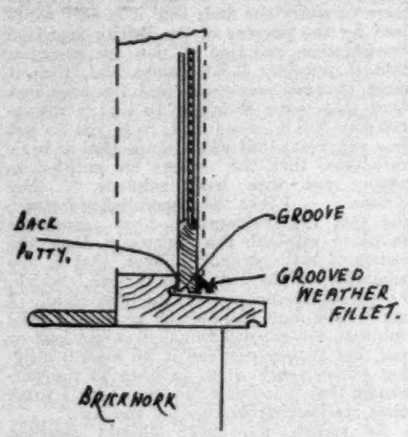
Sir,—Certainly. Any person interested can do so. It is implied by an S.R. and O. of 1921, No. 973, issued in respect to the Acts, and which sets forth the regulations in detail governing the preparation, etc., of schemes.

Lex.

Leakage Through Casement Dead Lights.

[Answers to "Rexor," January 15.]

Sir,—Water (not necessarily rain) often appears on the inside of casement dead lights; more often than not this proves to be condensation and not driven rain. "Rexor" may find this to be so in his case—more especially as the opening casements do not show similar wet As the dead lights can, as "Rexor" states, be easily tapped out, I suggest he takes



them out, and to make certain that no driven rain can be admitted by the way he complains of, he should (1) put a water groove in bottom of the light, (2) fix a weather fillet (with groove) on the outside of the light, (3) back putty the frame when putting back and fixing the dead light. R. H. W.

Sir,—From the information given by "Rexor," the trouble appears to be due to condensation on the inner surface of the glass which runs down and collects on the window board. The same condensation would occur in the case of opening lights, but probably escapes immediately to the outside at the point marked "water enters" on "Rexor's" sketch. A remedy, therefore, will be to provide similar means of escape in the case of fixed lights, such as forming an open joint between the sill and sash.

Reynolds and Young.

Sir,—This seems to be a pure case of capillary attraction occurring with the tight joint, which has probably opened to a slight degree, whereas the opening lights are probably well open and do not encourage the capillary attraction to the same degree. The lights may be taken out in dry weather and bedded in red lead and repainted, or a simpler way may be to merely nail a small additional bead bedded in red lead over the joint between casement and cill. Check.

Smoky Chimney.

[Answer to "Young Architect," January 1.]

Sir,—I had a similar room and chimney as occupied by "Young Architect," also in a fifteenth-century cottage. The large, straight chimney collects all the rain. I cured it without ruining the outside appearance by building a 6 in. high pier at each corner of the stack and laying a 2 in. stone slab on the top, slightly larger than the overall size of the chimney. If "Young Architect" finds the room draughty owing to the suction by the chimney, he can cure it by inserting some gratings near the floor in the inglenook. His sketch does not show what is on the back side of the fireplace, so I cannot judge whether this is feasible.

S. Whitmore Robinson.

Insulating.

[Answer to "Construction," January 15.]

Sir,—The walls should be constructed in two thicknesses of studding, with a layer of sound-resisting fibre board or insulating quilt between. The inside should then be lined with similar fibre board. False ceiling joists provide the means of dealing similarly with the ceiling, while the floor boards should be laid on a layer of insulating quilt. The door should be double and packed with cork dust, or lined with insulating board. If these measures are properly carried out, a thoroughly satisfactory result should follow.

Sound.

Soundproofing Semi-detached Houses.

[Answer to Messrs. Billham & Son, January 15.]

Sir,—The construction of the party walls in cavity construction is undoubtedly a check to the transmission of sound. The finishing of the walls with a good quality composition fibre board is still more effective, and, if carried out on both sides, should produce a soundproof wall for all practical purposes. Insulo.

Insulating and Soundproofing.

[Enclosures on these subjects received from Messrs. Joseph Stephenson and Co. (London) Ltd., and Messrs. Fredk. Jones and Co., Ltd., have been forwarded to Messrs. R. Billham and Son, and "Construction."—Ed.]

Cellulose Paint.

[Answers to "Modern," January 15.]

Sir,—There is no chemical reaction between a cellulose finish and a good lead base undercoat, but the latter must be smooth and free from every particle of dust, grease or dirt of any kind. Given these conditions, a good cellulose finish can be obtained. Gloss.

Sir,—In reply to "Modern," I find that it is not necessary to strip off old paint, but old paint work must be thoroughly washed and rubbed down, and a buffer coat sprayed on. Allow this to well harden overnight, and then follow up with colour coats in cellulose to suit. The buffer coat is a special undercoating supplied by makers. George W. Dunkley.

Reconstructed Wood.

[Answer to "Architect," January 15.]

Sir,—The material referred to is a mastic compound, setting hard, and capable of being planed and polished as your correspondent describes. It is suitable for stopping and for moulding into small fittings, such as switch plates and covers, or door furniture, etc. It is not obtainable in scantlings, nor is it likely that commercial processes will make it possible for such productions competing in price with natural timber. Process.

Town Planning.

[Answer to "Ratepayer," January 15.]

Sir,—The town plan of a district is available for the inspection of any ratepayer for the purpose of examining zoning density or any other required information. It is public property prepared for public benefit.

Municipal.

Combined Sewage System.

[Answer to "Estates," January 15.]

Sir,—The matter may be provided for in the local by-laws, but there is no provision in the model by-laws for any such contingency, and if the local by-laws are on that model, the authority has the right to demand each house unit to be provided with its separate means of sewage disposal, in the absence of a public sewer. An authority is not likely to insist on this where a more convenient and sanitary means of disposal is offered by a combined system. Septic.

[Other inquiries and answers are held over until next week.—Ed.]

THE BUILDING TRADE

THE LESSONS OF EXPERIENCE.—IV

By J. R. TAYLOR.

POWER OF SURVIVAL.

In times of severe depression such as that through which we are going it should encourage us to be reminded that our present experiences are not without precedent. Without going so far back as the "hungry 'forties," there has been more than one occasion on which the building trade has been required to tighten its belt and fight a grim battle for existence. It has always emerged from such encounter bruised, perhaps, shorn of a member or two, but full of courage and that invincible spirit of optimism without which builders could not exist. Optimism is an essential part of a builder's make-up, and in the long run events have always justified him.

There are still a good many actively engaged in the building trade who will recall the winter of 1894 and what happened then. A hard frost set in about Christmas and did not break up for some eleven weeks, during which time the building trade was brought to a complete standstill as regards outside work and a nearly entire cessation of work in the mill and workshop.

In those days there was no dole, and the assistance that could be given out of the trade union funds was small and soon exhausted. The operators endured great hardship, and the trade as a whole was very badly hit, but it survived.

At the conclusion of the Boer War a temporary boom was succeeded by a severe depression. At all times the building trade is amongst the last to recover from depression, because, generally speaking, trade at large must undergo a revival before capital can be released for new work. The boom was not on that occasion so reverberating as that which succeeded the late War, nor did the depression cut so deeply as that through which we are passing, and again we emerged, and on the whole, it is thought, strengthened by the experience. The present depression does not hit the operative so severely as those previously experienced, and there can be no doubt that we shall again emerge.

Slack Time Employment.

The suggestions as to how a nucleus staff may be kept together are in the main addressed to the smaller builder, though in regard to some matters there may be points that will serve as reminders to others. The small builder does not as a general rule keep a very elaborate set of books, nor employ a full-time storekeeper. As a result, after he has been for a considerable time in business he very seldom is thoroughly conversant with the full particulars of his stock, and his stores will contain a great many oddments that would be all the better for being once again brought to light. Many tail ends of material will be occupying the bottom of kegs and drums which, if released and returned as empties to makers, would bring in a sheaf of credit notes. The ironmongery store in particular will give a good return for the time taken in sorting and straightening up. Nearly empty screw packets will be found, some without covers and index labels. These have already occasioned waste of time and money by being explored in vain where the appropriate label would reveal their contents at a glance. Of late years it has hardly paid to look out tarnished brassware and return it for relacquering, but in respect to this we are now getting back to pre-War conditions. In any case, much of the ironmongery will be all the better for a rub with an oily rag and repacking in sound covers. Most builders will be so much struck with the unforeseen discoveries made in the ironmongery store that they will start a stock recording book or an index card system only to let it fall into disuse when times bring brisk business and no one can be spared from more urgent duties.

The plasterer's store will reveal bags with cakes of hardened cement and other materials that need to be turned out and removed to the rubbish tip, so that the sacks at least can be returned for credit before the bottoms rot out of them. Somebody's patent plaster or cement wants using up on jobbing work before old age renders it worthless. Broken into bundles of plastering laths need retying, and now is as good a time as can be found for beating up and cleaning hair so as to render it suitable for immediate use.

The plumber's shop will as a rule repay an overhaul. Solder joints can be cut out of old pipe and solder cleaned off old fittings, and when melted down and freed from dross the addition of a little block tin will make it all reusable with safety. Old iron service pipes are not usually worth preserving, but the fittings (crosses, tees, plugs, etc.), are worth reclaiming when there is nothing better to do. Packages of plumber's brassware may be opened and have the ends tinned before being repacked. Bobbins for the backs of projecting rainwater pipes may be cast out of old lead or cut off stout iron pipes. Ornamental lead tacks may be cast in advance. No very great amount of ingenuity is required for casting ornamental rainwater-heads and these, if in good taste, may receive approval later from an appreciative architect. The plumber, in short, is a man who can do much to prepare and extend his stock. In the smaller towns and country places, where a housebreaker is not employed for demolition, most builders accumulate a good deal of second-hand material. Much of it lies about for years without a use ever being found for it. A periodical sorting out has advantages. Some may be sent to an auctioneer's yard for disposal; a lot is best condemned and cut up for firewood. Where a builder has a considerable quantity available for firewood it may well repay him to have a small handbill printed, making this fact known and at the same time intimating his willingness to undertake all classes of jobbing and repairs. Old worked stone is seldom worth preserving and is generally more useful if broken up for concrete. If hard, a few padstones may sometimes be cut out before the remainder is condemned. All scrap metal should be collected and disposed of; it usually fetches a better price when sold in tons than in small quantities.

Before going on to make stock the plant may be overhauled. Scaffold poles should be examined and unsound material be dealt with. Very often unsound poles are turned over and rejected so many times that the aggregate of time wasted may represent much more than the value of the poles as new. It frequently happens that in busy times poles are brought on to a job unbarked and planks unhooped. To use poles with the bark on is dangerous unless chain ties are employed, and unhooped planks split at the ends occasioning waste; both may now be attended to. The poles should be sorted. Very straight and slender ones may with advantage be smoothed up and painted and disposed of as flagstaff or wireless poles. This offers an opportunity for another circular. Other slender poles may be specially prepared for light work in town. With six feet at the butt painted white and a coloured band about a foot deep at the top, a town job is brightened up and attention is attracted to the builder's name board. In passing, a builder may do worse than choose his colours and display them in his sign boards, at the tops of his ladders, on his haulage vehicles, not forgetting the hand-carts, and in other ways more or less obvious. If his tackle is kept smart and in good order such methods provide a useful advertisement.

I need not recapitulate all that may in quiet times be done to improve and preserve a builder's plant, as once the matter is started ideas will readily present themselves. In earlier times before so much machinery was used the joiners, at all events, could be usefully turned on to making stock; to-day it is more difficult. As a rule, in regard to utility articles the builder cannot successfully compete with the factories producing them, and for special work the architect quite naturally prefers to supply his own details. There are, however, a few things a joiner may be turned on to after he has repaired all the ladders, made one or two pairs of steps and trestles, and so on. A couple of dozen boards for water-waste preventor backs may be made up. Prepared shelving and other boards may be smoothed up for better-class work. Casings for stock-size doors may be prepared, even to the trenching of the heads, without undue risk of not proving usable. The flutings for draining boards may be worked on teak or sycamore, but if so it should be on long boards, so that when cut off the unworked portion will not be wasted. A few thousand plugs cut on the twist will hold all the better for being bone dry when eventually driven, and elm or other hardwood fixing pads may be cut to size and creosoted in the mill. Grounds may be cut, thicknessed, have bevel edge worked on to hold plastering, and then be primed and bundled up until wanted. Wood preservative may be preferred by some for the treatment of grounds, but the point is that they should not receive wet plastering mortar when in an unprotected condition. The plugs before referred to would also be all the better for being dipped in priming. Other useful stock may be manufactured which will vary according to the general characteristics of the district for which the builder caters. In an agricultural district, for instance, a few field gates will sooner or later find a sale, if it is made known that they are available at a competitive price.

Pre-cast concrete is now so widely used that it is safe to make up some of the commoner forms, and particularly so if storage can be provided under cover. Steps 12 in. by 6 in. in section and 3 ft. 9 in. or 4 ft. long are always usable. Not one architect in ten would object to a step 12 in. wide merely because he has specified one 10½ in. or 11 in. wide. In flights of steps the difference of going can be easily taken up if the widths are ample to begin with.

A builder may safely cast a considerable number of concrete lintols. Extra length and height seldom matter and add little or nothing to the cost when the displacement of brickwork over is taken into consideration. For use over inner doorways a key should be formed for plaster finish, and a plug or two be cast in for the reception of grounds for architraves. The top bed should be distinctly marked and reinforcement be on the generous side. They improve with age and are more safely handled than when green. Fixing bricks are always useful stock, which, if used with discrimination, will save a lot of plugging. They should be made a little larger than common bricks, so that they may stand a little proud and just master the first coat of plastering. Breeze is usually employed for this purpose, but sawdust and cement make a useful brick. It is better to experiment a little before making up any large quantity, so that they shall be of the right consistency and hold a driven nail firmly.

In earlier times the stand-by of a builder in slack periods was the building of a few

cottages, a pair of villas, or a couple of shops for letting and subsequent sale to investors. But in competition with housing erected on a large scale and wholesale estate development, this outlet for his energy does not offer as much scope, particularly in view of the restrictions placed upon him with regard to the development of land. Here and there opportunity presents itself for the erection of a small house or two, and where this occurs a builder might do worse than make an effort to keep a few pivotal men employed, even if he but barely covered his costs. In connection with such an adventure he might well submit his proposals to an architect for assistance, if only for the reason that by so doing he will keep touch. But apart from that, experience goes to show that a house designed by an architect always in the long run commands a better price than others not having that advantage, and better mortgage advances are obtainable when backed by an architect's approval.

The above-made suggestion as to the painting in colours of scaffolding and plant may be thought to be hardly in keeping with the builders' inherited respect for custom and tradition, and to be more appropriate to carnival, and reminiscent of Earl's Court Exhibitions, Venice at Olympia, or what not. But, with less fog in London and a clearer atmosphere elsewhere, we are, I think, beginning to develop a taste for brighter colours, as witness the Firestone factory, and, more emphatically, the "Daily Telegraph" clock. The suggestion has a practical basis in its application to town work, where without putting up a hoarding the builder frequently whitens the butts of poles and ladders as a means of protection. The coloured band at the tops of ladders and scaffold poles would serve to draw attention to damage received, which is occasionally hidden without being properly examined. The main point is, however, that it would tend to general tidiness and thereby the advertising value would be enhanced.

(To be continued.)

RENT RESTRICTION

Mr. N. F. Woodroffe, A.R.I.B.A., in a letter to *The Times* of January 13, in connection with the possible introduction of a new Bill dealing with Rent Restriction, makes the suggestion that the new Act should contain a definite scale of compensation at so much a room, equivalent to one or more quarters of rent, according to position and locality, of which the owner of the room or house might avail himself and offer to tenants if he desires possession to embark upon a genuine building scheme. In justification of this proposal he rightly draws attention to the obstacle Rent Restriction presents to innumerable extensions and new building schemes.

We regret that for many reasons we cannot approve of this suggestion. Mr. Woodroffe says in the same letter, "Many of the tenants refuse to consider removal on any terms, though others if a sufficiently tempting offer is made agree to quit, and invariably find other accommodation without much difficulty." The tenant is only in possession at all under a statutory right, and it surely would be extraordinary if the Legislature countenanced a form of bribery to make a tenant relinquish this right. But, further than this, it is obvious, were such a provision inserted in any Act, no tenant would ever leave without such payment.

May we suggest that the practical manner of dealing with this question would be by amendment of section 4, subs. (1) (*c*), of the Act of 1923, which is now substituted for section 5 of the principal Act of 1920? That section provides that no order for possession shall be made unless (*c*) "the dwelling-house is reasonably required for the purpose of the execution of the statutory duties or powers of a local authority or statutory undertaking, or for any purpose which in the opinion of the Court is in the public interest, and the Court, in either case, is satisfied as aforesaid as respects alternative accommodation." In the principal Act of 1920 this paragraph only applied to local authorities and statutory undertakings, and the latter portion, commencing "or for any purpose," was introduced in the Act of 1923. The only case we know of on this paragraph is Gooch *v.* Stratman (*The Builder*, June 10, 1927; *The Times*, May 5, 1927), where it was desired to obtain possession of a cottage in order to complete the extension of a wool warehouse in the City, but the application was refused on the ground that the plaintiff required the cottage merely for his own business, and the extension of trade, however useful to the public, was not a matter of public interest. One of the Judges in the Divisional Court was reported as saying that it was the uniform practice of Parliament not to grant compulsory powers to purchase land to any person carrying on business, however important it was, unless authorised by Parliament, and in our former note we ventured to point out that this was not a case of compulsory acquisition of land, but a claim on the part of the plaintiff to obtain possession of his own property freed from a statutory restriction. But apart from the dictum of only one of the Judges forming that tribunal, we think in the present industrial crisis it could no longer be said that "the extension of trade, however useful to the public, is not a matter of public interest," especially where the interests involved are the preservation of a small and old building, occupied by tenants with a mere statutory right, now continued for some 17 years, on the one hand, and a scheme of reconstruction and extension for industrial purposes on the other. In the above case there was evidence that there was a scarcity of wool warehouses in the City, and the obstructive cottage was, of course, a small building, one instance only out of many.

We therefore suggest that the remedy lies in amending the above paragraph in two respects—(1) to embrace improvement schemes, whether public or private, which have any commercial value, and (2) in such cases removing the provision that the existence of alternative accommodation must be proved. There is a precedent for this in the Housing Acts, and it will be remembered that in Parry *v.* Harding (1925, K.B. 111; *The Builder*, May 8 1925), before the Housing Act, 1925, came into force, the question was raised whether the Rent Acts over-rode the provisions in the Housing Act, 1919, which enabled the local authority to obtain possession for an improvement scheme, a small cottage let on a weekly tenancy at 6s. 6d. standing in the way of a scheme in Exeter. The legislative puzzle raised in that case has been set at rest in section 128 of the Housing Act, 1925, which came into operation after the hearing of that case, and also by section 59 of the Housing Act, 1930, by the express exclusion of the Rent Acts, but now that the encouragement of private enterprise in building and the provision of commercial facilities has assumed importance almost equal to the housing schemes carried out by local authorities, the statutory tenant, long under notice to quit and holding over for his own convenience, should be rendered subservient to the public interest, and, like other members of the public, should be called upon to make some sacrifice to the national necessity

BUILDING WAGES

A meeting in London of the National Joint Council for the Building Industry endorsed the decision previously arrived at to cut builders' craftsmen's and labourers' wages by one halfpenny an hour on and from February 1.

It is provided that the rate payable to labourers in any grade shall not be less than 75 per cent. of the craftsmen's rate. The Council made regradings involving a relatively higher wage classification in 23 districts, one exceptional rate and three first gradings. The Council also approved a redrafted version of the National joint agreement governing wages and conditions in the industry.

BOOK REVIEWS

Settled Land Conveyancing. By A. H. Cosway. (London: Effingham Wilson.) 5s.

If we may say so, Mr. Cosway has made a great advance since the publication of the first edition of his "Conveyancer's Handbook," in which he expressed the view that the new Acts relating to conveyancing were not so formidable as many people represented them to be and approached the subject in a light-hearted spirit. His third edition of the same work showed a great advance, the author frankly admitting the great inherent difficulties of the legislation, and the volume now before us, in which the author treats of Settled Land Conveyancing, is conceived in the same serious spirit. In his preface he says: "It is no exaggeration to say that the subject of settled land in some of its phases constitutes the most difficult problem with which the conveyancer is confronted, and it is a subject which many approach with something like dread."

The new conveyancing, which was intended to simplify the law, has at present only caused great uncertainty in many matters with which both conveyancers and the Courts were familiar. This may be a necessary consequence of any innovation on so large a scale, but at present it is the cause of both trouble and expense to laymen, who will receive some consolation from the statement by the author in his preface, that at some future date some of the "terrors" connected with the conveyancing of settled land may disappear. That time will come when, as the author observes, the "principal vesting deed" required under the new system will become the root or title in all cases, but this will not be for some years yet to come, as it must be a gradual process, depending upon the sale of estates and the happening of some occasion when the resort to the vesting deed will be compulsory to enable an estate to be dealt with.

The vesting deed and other matters appear to be clearly dealt with in the present volume, so far as we have been able to examine it, and there are precedents and a table of cases. The volume should prove very helpful to those who are compelled to overcome their dread and face the "terrors" of this subject.

Conveyancers' Costs. A Handbook with Precedents. By F. W. Broadgate. London: Effingham Wilson. Price 10s. 6d.

This is a very technical little handbook written to enable solicitors to ascertain the appropriate charges in connection with that branch of the law which forms an important part of their work—conveyancing. The author claims to have dealt with the subject in a "somewhat unusual method," to adopt his own words in the preface, by an alphabetical arrangement which enables the appropriate charges to be ascertained by a simple reference. That method appears to be to set out the material Acts and Orders and then to group the matters therein dealt with in alphabetical order. There are also numerous precedents of scale and detail charges intended to enable a solicitor or his clerk to prepare a bill of costs as well as comprehensive tables of scale charges. Special matters under recent Acts, such as Land Charges, Land Registration, and the Extinguishment of Manorial Rights, are dealt with, and there is an index. The matter is too highly technical for us to express any opinion on the value of the work in these pages, but the notes are supported by reference to decided cases, of which there is a table, and it appears to give comprehensive information in a small space.

Obituary.

The death has occurred, at the age of seventy-five, of Mr. James Tucker Yabsley, who carried on business as a builder at Ivybridge, Devon, in which town he had been resident for half a century.

NEW BUILDINGS IN LONDON

Aldersgate-street, E.C.—RECONSTRUCTION.—No. 48 is to be reconstructed. The owners are the British Land Co., Ltd., 67, Basinghall-street, E.C.2. Plans are by Messrs. J. D. Mathews, Son and Ridley, 3, Paul's Bakehouse-court, E.C.4, and the contractors are Messrs. Killby and Gayford, Ltd., 87, Worship-street, E.C.2.

Barnes.—BANK.—Plans have been approved for the erection of a bank, etc., with flats over, on the Cedars estate, Upper Richmond-road, for the National Provincial Bank, Ltd. Mr. F. C. R. Palmer, F.R.I.B.A., 15, Bishopsgate, E.C., is the architect. No building contract has yet been placed.

Bermondsey.—ALTERATIONS.—Messrs. H. Parkinson and Co., 4½, Wharton-street, W.C.1, are the builders for alterations to the "Earl of Derby" public-house, 185, Grange-road. The plans have been prepared by Mr. F. S. Newnham, of Messrs. Barclay, Perkins and Co., Ltd., Park-street, S.E.1.

Bermondsey.—FLATS.—The B.C. has had plans prepared and approved for the erection of 20 flats on the Vauban-street site. The General Manager of the Housing Committee has estimated the work at £12,000.

Bermondsey.—REBUILDING.—Messrs. Watney, Combe, Reid & Co., Ltd., Stag Brewery, Pimlico, S.W.1, are to rebuild the "Prince of Wales" public-house, Riley-street and Whitstable-street, S.E. No building contracts have yet been placed.

Catford.—STADIUM.—Work is now proceeding for the construction of a new stadium at Station Approach, Catford. The work is being carried out by Messrs. Frank Eve & Co., 18, Craven-street, W.C.2, who prepared the plans.

Croydon.—ALTERATIONS.—Mr. J. Cannell, 52, Holborn-viaduct, E.C.1, is the architect for alterations and additions to 74, North End. No contract has yet been let.

Deptford.—PREMISES.—New branch premises are to be erected at 5-9, High-street, Deptford, S.E., for Messrs. Montague Burton, Ltd. Plans have been prepared by Mr. Harry Wilson, 81, North-lane, Roundhay, Leeds.

Ealing.—CENTRE.—Messrs. E. W. Perry and Daw, 21, Liverpool-street, E.C.2, have a scheme in hand for the erection of an amusement centre in Northfields-avenue and Windmill-road.

East Ham.—EXTENSIONS.—Messrs. Gloy & Adhesives, Ltd., of Eighth-avenue, E., are to have their works extended. The architect is Mr. T. Anders, of Beehive Estate Office, Eastern-avenue, Ilford, and the builders are Messrs. Norton Bros. & Co., of Ilford.

East Ham.—EXCHANGE.—H.M.O.W. are inviting estimates for the erection of an employment exchange at East Ham, E.

Edmonton.—SHOPS.—A block of shops are to be erected at Edmonton, N., together with a number of houses. Plans have been prepared by Mr. G. G. Wimbourne, A.R.I.B.A., 214, Bishopsgate, E.C.2. The building work will be carried out by direct labour.

Euston. — EXCHANGE. — H.M.O.W. have placed a contract with Messrs. Hall, Beddall & Co., Ltd., Pitfield Wharf, Waterloo Bridge, S.E.1, for the erection of the Euston telephone exchange, N.W.

Golders Green.—CHURCH.—Plans have been prepared for the new Church of St. Alban. The architect is Sir Giles Gilbert Scott, R.A., 7, Gray's Inn-square, W.C.1. The estimated cost is £21,000, and a contract has been let to Messrs. F. G. Minter, Ltd., Ferry Works, Putney, S.W.15.

Great Cumberland-place. — FLATS.—Messrs. H. Sabey and Co., Ltd., 7, South Wharf, W.2, have demolished premises in Great Cumberland-place, W.1, where a block of flats is to be erected. The architect is Mr. W. E. Masters, F.R.I.B.A., 28, Upper Gloucester-place, N.W.1, and the builders are Messrs. Gee, Walker and Slater, Ltd., 32, St. James's-street, S.W.1.

Great Portland-street. — ALTERATIONS. — Messrs. Soole & Son, Ltd., Richmond, are carrying out alterations to the post office for H.M.O.W.

Great Ormond-street.—EXTENSIONS.—Plans have been prepared for extensions to the Hospital for Sick Children. The architect is Mr. E. Stanley Hall, 54, Bedford-square, W.C.1.

Greenwich.—ALTERATIONS.—For alterations to the post office, H.M.O.W. have placed a contract with Messrs. Thomas & Edge, Ltd., 4, Eton-road, S.E.18.

High Holborn. — REBUILDING. — Messrs. Waite & Waite, 15, Great Castle-street, W.1, are the architects for the rebuilding of 188-190, High Holborn, W.C.1. Messrs. Hudson, Ltd., 636, Commercial-road, E., are carrying out the demolition. No contracts have yet been settled.

Hornsey.—SHOPS.—A block of shops, together with residential flats, is to be erected at Crouch End Hill, Hornsey. Plans have been prepared by Mr. H. J. White, 405, Holloway-road, N.7. The contractors are Messrs. Winskell, Cot Wood-street, Barnet.

Houghton-street. — EXTENSIONS. — Messrs. Trehearne & Norman, Preston & Co., 83, Kingsway, W.C., are the architects for extensions to the London School of Economics at Houghton-street, Kingsway. The builders are Messrs. Prestige and Co., Ltd., Cambridge Wharf, 149, Grosvenor-road, Westminster, S.W.1.

Kingston-on-Thames.—OFFICES. — Messrs. W. H. Gaze and Sons, Ltd., 19, High-street, Kingston-on-Thames, are erecting new offices and showrooms for Messrs. Carter and Young.

Lambeth.—FLATS.—Mr. Louis de Soissons, F.R.I.B.A., Blue Ball-yard, S.W.1, is the architect for a block of flats on the Duchy of Cornwall estate. No contracts have yet been placed.

Lewisham. — BUILDING. — Messrs. S. W. Farmer & Son, Ltd., 92, Courthill-road, S.E.13, are to have a new building erected in Algernon-road, abutting upon Mercy-terrace. No contracts have yet been placed.

Marylebone-road.—HOME.—Messrs. Leslie and Son, Kensington-square, W.8, are the builders for a nursing home in Marylebone-road, with 600 beds for patients and hotel accommodation for friends and relatives. The scheme will involve an estimated expenditure of £1,000,000. The work is for the Medical Treatment and Nursing Home Syndicate. The architect is Mr. C. E. Elcock, F.R.I.B.A., of Messrs. Elcock and Sutcliffe, Adam House, 60, Strand, W.C.2.

Newington Butts. — RECONSTRUCTION.—Plans have been prepared by Messrs. Riley and Glanfield, FF.R.I.B.A., 6, Raymond-buildings, Gray's Inn, W.C.1, for the reconstruction of branch premises at 121-123, Newington Butts, S.E., for Messrs. West (Butchers), Ltd., 4, West Smithfield, E.C.1.

Richmond.—REBUILDING. — The "Crown" public-house, Lower Mortlake-road, is to be rebuilt, for Messrs. Truman, Hanbury, Buxton, Ltd., Brick-lane, E.1, to the plans of the staff architect. The contractors are Messrs. H. V. Clogg, 159, Hanbury-street, E.1.

Smithfield.—IMPROVEMENTS.—A contract is to be placed shortly for building improvements at the Smithfield Depôt, E.C., for the G.W.R. Co. Plans have been prepared by Mr. P. Culverhouse, F.R.I.B.A., Paddington Station, W.2.

Southwark.—PREMISES.—Mr. Joseph Emberton, A.R.I.B.A., 136, Regent-street, W.1, is the architect for business premises to be erected at Bankside, S.E.1.

Tottenham Court-road.—PREMISES. — New premises are to be erected at 7-9, Charlotte-mews, W.1. Plans have been prepared by Messrs. A. E. Hughes and Son, 28, Mortimer-street, W.1, and the contractors are Messrs. F. and H. F. Higgs, Ltd., Station Works, Hinton-road, S.E.24.

Walthamstow.—SCHOOL.—Work has commenced on the new infants' block of Roger Ascham schools, Billet-road, for the Borough Council, from the plans prepared by the Borough Engineer, Mr. D. Furness, A.M.Inst.C.E. The contractor is Mr. W. M. Brand, F.I.O.B., of 51, Old Hill-street, Stamford Hill, N.16.

Wembley.—STATIONS.—Plans have been prepared, under the direction of Mr. E. A. Wilson, M.I.C.E., chief engineer, Metropolitan Railway, Baker-street Station, N.W.1, for two new stations on the Wembley to Stanmore extension of the railway.

Westminster.—HOUSING.—The Westminster City Council are considering a proposal that 1 to 9 and 11 to 17, Horseshoe-alley, 67 to 69, Petty France, and 14 and 15, Vandon-street, be scheduled as a slum clearance area.

Westminster. — OFFICES. — No. 16, Queen Anne's-gate, S.W.1, is to be converted into offices. Plans have been prepared by Mr. P. Boddy, 19, Palace-street, S.W.1. The contractors are Messrs. Sabey and Son (Islington), Ltd., 100, Great Russell-street, W.C.1.

Wigmore-street. — ALTERATIONS. — Alterations are to be carried out at No. 30, for new branch premises for Messrs. Boots, chemists, of Nottingham. Plans have been prepared under the direction of Mr. Percy Bartlett, A.R.I.B.A., staff architect, Nottingham. The contractors are Messrs. A. E. Symes, Ltd., 1A, Carpenters-road, Stratford, E.15.

NEW CINEMAS

Camberley.—A contract for the erection of the "Capitol" cinema, Frimley-road, Camberley, has provisionally gone to the Pitcher Construction Co., Ltd., of London. Plans, for the Capitol (Camberley), Ltd., have been prepared by Mr. Maurice B. Lawson, F.I.A.A., Lloyds Bank Chambers, Camberley. A full list of tenders will be found on page 206.

Camberley.—A new cinema is to be erected on a site in London-road, Camberley, to plans by Mr. H. S. Scott, A.R.I.B.A., 115, Colmore-row, Birmingham. The contractors are Messrs. T. Elvins & Son, Naden Works, Soho Hill, Birmingham.

Ealing.—Work will be begun in March on the new cinema that is to be erected at the west end of Sandringham-gardens, opposite the Town Hall. Building plans have been passed by the local authority last week. The cinema will seat 2,400 people, 960 of whom will be accommodated in a balcony. The architects are Messrs. North, Robin & Wilsdon, Townsend House, Greycoat-place, S.W.1. Tenders have not yet been invited for the building work.

Haywards Heath.—Two new cinemas are to be erected in Haywards Heath. Plans have been prepared by Messrs. Stonham & Addison, Upperton-road, Eastbourne, for one of the schemes on a site at Penymount-road; and Mr. J. Van Koert, 16, Lewes-road, Brighton, is the architect for the erection of the second super on a site in Broadway.

Hornchurch.—The Super Cinema is to be modernised and enlarged to the plans now in course of preparation by Mr. Leslie H. Kemp, A.R.I.B.A., 38, John-street, Bedford-row, W.C.2. This cinema has been acquired by Mr. D. J. James, 38, Reservoir-road, Brockley, S.E.4.

Liverpool.—Mr. A. E. Shennan, F.R.I.B.A., 14, North John-street, Liverpool, is architect for a 1,750-capacity cinema at Knotty Ash, on the Dovecot estate, for Mr. Robert Wilkinson, Grange-mount, Birkenhead. Building is expected to commence at once, plans having been approved by the Liverpool justices.

Marple.—Marple Cinema Company (managing director, Mr. Ernest S. Allen) have acquired the Union Rooms and three adjoining houses in Stockport-road for conversion into an up-to-date cinema. The architect is Mr. R. N. Sampson, 97, Middlewood-road, Sheffield. Contracts have not been let.

Torquay.—A picture-house, estimated to cost £20,000, is to be erected on land at the Torbay County Club. The cinema is to be called the "Palladium."

Weybridge.—Included among the plans submitted to the Weybridge U.D.C. for approval was one from Messrs. T. H. Adamson and Son, builders, of Putney, S.W., for a cinema at the corner of Queen's-road and York-road. The plan was approved, subject to the County Council regulations.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st FEBRUARY, 1931.

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/6	1/0	1/6	1/6	1/6	1/6	1/6	1/1½
Accrington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Aldershot	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Alfreton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Alnwick	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Altrincham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ashford (Kent)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Ashington	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ashton-under-Lyne	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Aylsham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Barnstaple	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barrow-in-Furness	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Barry	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Berwick	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bexhill	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Birkenhead	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Birmingham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bishop Auckland	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Blackburn	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Blackpool	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bognor Regis	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bolton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bradford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bradford-on-Avon	1/3	1/3	1/3	1/3	1/3	1/3	1/2	11½
Braintree	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bridlington	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bristol	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromsgrove	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bromyard	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Bungay	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Burnley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury St. Edmunds	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Buxton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Cardiff	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Carlisle	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chatham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Chelmsford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cheltenham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chesterfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chorley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cirencester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Clacton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cranbrook	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Crewe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cromer	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Darlington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Deal	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Denbigh	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Derby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Devizes	1/3	1/3	1/3	1/3	1/3	1/3	1/2	11½
Dewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Doncaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dorchester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Dorking	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Dovercourt	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Driffield	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Droitwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
E.Glam.(Mon.Val.)	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ely	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Exmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Fakenham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Felixstowe	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Folkestone	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Frome	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Glossop	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Godalming	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Goole	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Gosport	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grantham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Gt. Yarmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Grimsby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Guildford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Halifax	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Harpenden	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Harrogate	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hartlepools	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Harwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hastings	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Hatfield	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hednesford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hereford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Herne Bay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Huddersfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hull	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hunstanton	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huntingdon	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Isle of Wight	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Keighley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Kettering	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Kidderminster	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Kings Lynn	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leamington Sp	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Leeds	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leicester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leighton Buzzard	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Lichfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lincoln	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Littlehampton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Liverpool	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Llandudno	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Llanelly	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
London—								
12 m. radius	1/8	1/8	1/8	*	1/8	1/8	1/8	1/7
12-15 m. radius	1/7½	1/7½	1/7½	*	1/7½	1/7½	1/6½	1/2‡
Loughborough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lowestoft	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Macclesfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Maidstone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Malvern	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Manchester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Mansfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Margate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
MarketHarborough	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Matlock	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Melton Constable	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Melton Mowbray	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Merthyr Tydfil	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Middlesbrough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Newark	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Newbury	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Newcastle-on-Tyne	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Newcastle-u-Lyme	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
New Forest	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Newmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newport, Mon.	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Northampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Nuneaton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Paignton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Peterborough	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Pontypridd	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Preston	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ramsgate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Redcar	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Redditch	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Reigate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Retford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Ripon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rochdale	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Rochester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Saffron Walden	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
St. Albans	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
St. Helens	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Sawbridgeworth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Saxmundham	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Scarborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sevenoaks	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sheffield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Shrewsbury	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Sittingbourne	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
South Shields	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stevenage	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Stockport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stockton-on-Tees	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stoke-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourbridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stourport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stowmarket	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Stratford-on-Avon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sunderland	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Swaffham	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Swansea	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Tamworth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Taunton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Thetford	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Torquay	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Trowbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Tunbridge Wells	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Uttoxeter	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wakefield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Walsall	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Walsden	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warminster	1/3	1/3	1/3	1/3	1/3	1/3	1/2	11½
Warrington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warwick	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wells (Norfolk)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Welwyn Gar. City	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
West Bromwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Weston-sup-Mare	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weymouth	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Whitby	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wigan	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Winchester	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wisbech	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wolverhampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Woodbridge	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Worcester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Worksop	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Worthing	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wrexham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wycombe	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wymondham	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
York	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2

‡ This rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, as and from the 1st February, 1931, is 1/10½ per hour.

For Building Trade wages in Scotland, see page 204.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

JANUARY 25.

Ayr.—Housing.—For (1) Girdle Toll site, Stanecastle, Irvine, 60 houses, and (2) Tarbolton, Town House site, 8 houses, for C.C. William Reid, County Architect, 14, Wellington-sq., Ayr.

Carlisle, Padiham and Kearsley.—Site Works, etc.—For Central Electricity Board. Secretary, Trafalgar-bldgs., 1, Charing Cross, S.W.1. Dep. £2 2s.

Dewsbury.—Wiring.—Electric wiring at Wheelwright Grammar School for Girls, off Birkdale-rd., for C.B. R. W. Grubb, M.I.E.E., electrical engineer, Electricity Dept., Bradford-rd.

Guildford.—House.—Detached house at sports ground, Woodbridge-rd., for T.C. J. W. Hipwood, B.S. Dep. £1 1s.

Keith.—Houses.—1 block of 3 houses of 3 apartments and 1 block of 2 houses of 4 apartments at Moss-st., for T.C. Geo. S. Stewart, B.S.

London.—Painting, etc.—North Eastern Hospital, St Anne's-rd., S. Tottenham, N.15; St. George's Home, Milman-st., Chelsea, S.W.10, and St. Pancras Hospital, Pancras-rd., N.W.1, for L.C.C. Chief Engineer, Old County Hall, Spring-gdns., S.W.1. Dep. £1 each.

Maidstone.—Housing.—8 houses in Staplehurst, for R.D.C. T. A. Busbridge, S. Dep. £1 1s.

Manchester.—Roof.—Roof over females' washbaths, etc., at New Islington baths, for T.C. City Architect. Dep. £1 1s.

Norwich.—Alterations.—Additions to farm house at Bluebell-rd., to adapt it for use as golf club house, for T.C. J. S. Bullough, City E. Dep. £1.

Portishead and Upper Beat.—Site Works, etc.—For Central Electricity Board. Secretary, Trafalgar-bldgs., 1, Charing Cross, S.W.1. Dep. £2 2s.

St. Austell.—Convenience.—Alteration and conversion of existing buildings at Market Hill to public convenience, for U.D.C. E. D. Groves, E. and S.

Skegness.—Chalets.—12 bathing chalets, in timber construction, for U.D.C. S. Dep. £1 1s.

JANUARY 26.

Dublin.—Repainting.—Of ironwork on West Quay walls and bridges, from O'Connell Bridge to Kings bridge, for Dublin Port and Docks Board. E., East Wall, Dublin, C.10. Dep. £1 1s.

Lanark.—Houses.—60 at Logan-st., Blantyre, and 50 at Cleland, for C.C. P. C. Smith, County Housing and Town Planning Department, 13, Clydesdale-st., Hamilton.

Lancaster.—Hospital.—New Central Hospital at Beaumont Bridge, for Lancaster and District Joint Hospital Board. Frederick Hill, B.S. Dep. £3 3s.

Leeds.—Demolition.—Of building in Park-lane, Park-sq. and Somers-st., and buildings on site of York-st. gas works; also offers for metal work, for T.C. J. E. Acfield, City E.

Sevenoaks.—Bath.—New glazed roof light over swimming-baths in Eardley-rd., for U.D.C. S.

Shanklin.—Alterations.—Also additions to Town Hall, for U.D.C. E. C. Cooper, architect and surveyor. Dep. £3 3s.

Sligo.—Installation.—Of electric light at District Mental Hospital, for Committee. D. McAteer, consulting engineer, 17, Upper Merrion-st., Dublin. Dep. £2.

JANUARY 27.

Aberdeen.—Buildings.—At new infirmary at Foresterhill, for Royal Infirmary. James B. Nicol, architect, 367, Union-st., Aberdeen.

Barrow-in-Furness.—Heating.—Accelerated low-pressure hot water heating, etc., at Post Office, for H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

***Cosham.**—Addition to Portsdown Schools. Adrien J. Sharp, The Guildhall, Portsmouth. Dep. £2 2s.

Liverpool.—Houses.—(*a*) 116 non-parlour houses and maisonettes on portion No. 3a of the Dovecot estate, and (*b*) 46 parlour houses and maisonettes on the Prescot-rd. frontage of Knotty Ash Estate, for T.C. Director of Housing. Dep. £1 1s.

JANUARY 28.

Dumfries.—Heating.—Heating installation at new municipal chambers, for T.C. T. I. Morton, measurer, 93, Irish-st.

Galway.—Alterations.—To premises known as "Sherwoods Fields," for use as National School, for Commissioners of Public Works. T. Cassedy, Office of Public Works, Dublin. Dep. £1.

Ormskirk.—Houses.—(*a*) 8 non-parlour type at Mill-lane, Burscough, and (*b*) 5 non-parlour and 1 parlour type house in Derby-st. West, Ormskirk, for U.D.C. S. Dep. £2 2s.

Stafford.—Telephone Exchange and Alterations to Post Office.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Thornaby-on-Tees.—Houses.—101, on Grange Farm estate, Thorntree-rd., for T.C. W. E. Orchard, B.E. and S. Dep. £3 3s.

Woodbridge.—Cottages.—Two pairs of cottages at Grundisburgh, for R.D.C. G. G. Kell, clerk. Dep. £2 2s.

JANUARY 29.

Darlington.—Installation.—Of electric light fittings at public baths, Kendrew-st., for C.B. Ernest Minors, B.S.

London.—Heating.—Low-pressure hot water heating at Registrar-General's Department, Somerset-house, W.C., for H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Oldbury.—Houses.—34, at Newbury-lane, for U.D.C. W. Greenwood, E. and S. Dep. £2 2s.

Wath-upon-Dearne.—Extensions.—To public baths, for U.D.C. H. Cranage, E. and S. Dep. £1 1s.

JANUARY 30.

Buckfastleigh.—Mortuary.—For U.D.C. S., Fore-st.

Buckfastleigh.—Chamber.—Neutralising chamber in connection with Buckfastleigh water supply, for U.D.C. R. Hansford Worth, 42, George-st., Plymouth.

Lossiemouth.—Houses.—Six blocks of three, four and five-apartment flatted-type houses, for T.C. G. King, B.S.

Tranent.—Houses.—30, for T.C. Morham & Brotchie, 29, Hanover-st., Edinburgh.

Urmston.—Houses.—45, adjoining Ciss-lane, for U.D.C. J. Heath, architect. Dep. £2 2s.

FEBRUARY 1.

Bury.—Houses and Flats.—For the Corporation. Town Clerk, Municipal Offices, Bank-st. Dep. £5.

FEBRUARY 2.

Leytonstone, E.11.—Extension.—To Electricity offices. Town Clerk, Town Hall, Leyton, E.10. Dep. £3.

***London, N.1.**—Electricity sub-station, for the Islington B.C. E. C. P. Monson, F.R.I.B.A., Finsbury Pavement House, 120, Moorgate, E.C.2.

Skegness.—Conveniences.—Public conveniences at North End of Waterway, North Parade, for U.D.C. S. Dep. £1 1s.

Southampton.—Demolition.—Demolishing 6 houses in Windsor-rd., Totton, for C.C. W. J. Taylor, C.S., Winchester. Dep. £1 1s.

Stourbridge.—Alterations and Additions to Post Office.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

FEBRUARY 3.

East Ham, E.—Employment Exchange, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

***Flint.**—Houses.—W. B. Edwards, architect, 84, Church-st. Dep. £3 3s.

Manchester.—Tiles.—(*a*) Cement plastering to dadoes to receive wall tiles, and (*b*) supply of wall tiles, at Withington Hospital and Institution, Nell-lane, West Didsbury, for Corporation. F. E. Warbreck Howell, T.C.

FEBRUARY 4.

Erdington, Birmingham.—Post Office.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

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FEBRUARY 6.

Wolstanton.—Conversions.—Of 58 existing privies into water-carriage system in Wilton-st., Cross Heath, for U.D.C. W. Simcock, sanitary inspector.

FEBRUARY 8.

Nottingham.—Fencing.—1,000 lin. yds. of wrot iron fencing and entrance gates around Colwick Hill school site, for T.C. T. Wallis Gordon, City E. and S. Dep. £1.

FEBRUARY 9.

***Hornchurch.**—Rush Green.—Proposed Council School, for the Essex C.C. County Architect, County Hall, Chelmsford. Dep. £2 2s.

***Hornchurch.**—Bush Elms.—Proposed Council School, for the Essex C.C. County Architect, County Hall, Chelmsford. Dep. £2 2s.

Stainforth.—Building.—Removal of temporary school building from South Kirkby to Stainforth Council school and erection of conveniences, for West Riding E.C. Education Officer, County Hall, Wakefield.

Weston-super-Mare.—Hospital.—Buildings and alterations to existing buildings at Statutory Hospital, Drove-rd., for U.D.C. H. A. Brown, E. and S. Dep. £3 3s.

FEBRUARY 10.

Cuckfield.—Cottages.—8 at Slaugham-rd., Handcross; 6 at Church-rd., Albourne; and 3 at Luxford-rd., Lindfield, for R.D.C. Alfred Hutchings, S. Dep. £2 2s.

Weymouth and Melcombe Regis.—Houses.—62 non-parlour type on Westham housing estate, for T.C. P. Smallman, T.C. Dep. £2 2s.

FEBRUARY 27.

Kent.—Painting.—Also general repairs to certain school premises, for E.C. W. H. Robinson, F.R.I.B.A., Springfield, Maidstone.

MARCH 1.

Uruguay.—Slaughterhouse.—Large slaughterhouse and plant, for Frigorifico Nacional. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. G.X. 10927.)

NO DATE.

Hull.—Demolition.—Buildings on north side of Vernon-st., for T.C. H. Hamer, City E.

MATERIALS, etc.

JANUARY 25.

Blackpool.—Builders' Materials.—For C.B. Borough Treasurer.

Finchley.—Granite, etc.—For U.D.C. P. T. Harrison, E.

Hornsey.—Road Materials.—For T.C. W. H. Adams, B.E. and S.

Lincoln.—Tar.—For Lindsey (Lincs.) C.C. A. G. Bradshaw, C.S., Newland, Lincoln.

Pontefract.—Road Materials.—For T.C. B.S.

Staffordshire.—Gravel Chippings.—For C.C. C.S., Lloyds Bank-chambers, Stafford.

Willesden.—Road Materials.—For U.D.C. F. Wilkinson, E.

JANUARY 26.

Southall-Norwood.—Highway Materials.—For U.D.C. J. B. Thomson, E. and S.

Surrey.—Road Materials.—For C.C. C.E., Kingston-on-Thames.

JANUARY 27.

Bexley.—Granite Kerb.—For U.D.C. G. A. Joy, S.

Kettering.—Road Materials.—For R.D.C. H. J. Parker, S.

JANUARY 28.

Glamorgan.—Road Material.—For C.C. E. Chas. Pole, Acting County Surveyor, County Hall, Cardiff.

Tring.—Granite, etc.—For U.D.C. H. N. Hedges, S.

JANUARY 29.

Crayford.—Road Materials.—For U.D.C. Frank Leary, E. and S.

Grimsby.—Highway Materials.—For C.B. H. G. Whyatt, B.E., 170, Victoria-st.

Welwyn Garden City.—Road Materials.—For U.D.C. Capt. W. E. James, S.

Wood Green.—Road Materials.—For U.D.C. E. and S.

JANUARY 30.

Canterbury.—Road Materials.—For T.C. H. M. Enderby, City E. and S.

Guildford.—Highway Materials.—For T.C. J. W. Hipwood, B.S.

Hertfordshire.—Granite, etc.—For C.C. A. Ernest Prescott, C.S., Hatfield.

London.—Building Materials.—For Finsbury B.C. B.E.

Mitcham.—Cement, etc.—For U.D.C. S. Chart, clerk.

Newmarket.—Granite, etc.—For U.D.C. W. H. Eley, E. and S.

Stockport.—Road Materials.—For C.B. W. F. Gardner, B.S.

JANUARY 31.

Trowbridge.—Granite, etc.—For U.D.C. G. W. J. Clark, E. and S.

FEBRUARY 1.

Bedford.—Road Materials.—For T.C. C. H. Blakeway, B.E. and S.

Bridgwater.—Road Materials.—For T.C. R. A. Watson, B.E. and S.

Bucks.—Highway Materials.—For C.C. E. Winfield, C.S., Aylesbury.

Gillingham.—Road Materials.—For T.C. J. L. Redfern, B.E. and S.

Ilford.—Highway Materials.—For T.C. L. E. J. Reynolds, B.E. and S.

Leeds.—Builder's Materials.—For T.C. J. E. Acfield, City E.
London.—Building Materials, etc.—For St. Marylebone B.C. T.C.
London.—Road Materials.—For Hampstead B.C. P. H. Harrold, T.C.
Sutton-in-Ashfield.—Gravel, etc.—For U.D.C. W. Burn, S.
West Suffolk.—Highway Materials.—For C.C. E. H. Bond, C.S., Bury St. Edmunds.

FEBRUARY 2.

Cheshunt.—Road Materials.—For U.D.C. J. E. Sharpe, E. and S.
London.—Highway Materials.—For Holborn B.C. J. E. Parr, B.E. and S.
London, S.W.11.—Builder's Materials, etc.—For Battersea B.C. Town Clerk, Town Hall, Battersea.

FEBRUARY 3.

Chatham.—Highway Materials.—For T.C. R. L. Honey, B.E. and S.
Clacton.—Road Materials.—For U.D.C. W. Alston, S.
Leeds.—Iron Castings.—For T.C. H. Shortreed, Waterworks Manager, 26, Great George-st.
London.—Highway Materials.—For Southwark B.C. D. T. Griffiths, T.C.
Richmond (Surrey).—Builder's Materials, etc.—For T.C. B.E.
Southend-on-Sea.—Building Materials.—For C.B. A. C. Johnson, Borough Electrical Engineer and Manager, 85, London-rd.

FEBRUARY 4.

London.—Highway Materials.—For Kensington B.C. F. Webster, T.C.
London.—Road Materials.—For Greenwich B.C. B.E.
South Africa.—Pipes,—3,006 ft. of 3 in. and 1,998 ft. of 4 in. cast-iron pipes, sluice valves, surface boxes, etc., for Pietermaritzburg T.C. Dept. of Overseas Trade, 35, Old Queen-st., London, S.W.1. (Ref. G.X. 11052.)

FEBRUARY 5.

Woodford.—Highway Materials.—For U.D.C. A. D. Ward, S.

FEBRUARY 6.

Chislehurst.—Road Materials.—For U.D.C. J. J. Brown, clerk.
Kent.—Roadstone.—For C.C. H. T. Chapman, C.S., Maidstone.
Kent.—Tar, etc.—For C.C. H. T. Chapman, C.S., Maidstone
Little Hulton.—Road Materials.—For U.D.C. J. H. Hoyes, clerk.
London.—Highway Materials.—For Westminster City Council. P. Morris, T.C.
Northamptonshire.—Road Materials.—For C.C. E. A. Black, C.S., Northampton.
Penge.—Cement, etc.—For U.D.C. S.

FEBRUARY 8.

Durham.—Highway Materials.—For C.C. W. J. Merrett, C.E. and S., 43, Old Elvet, Durham.
London.—Highway Materials.—For Bethnal Green B.C. A. E. Darby, B.E. and S.
Worthing.—Kerb, etc.—For T.C. P. E. Harvey, B.E. and S.

FEBRUARY 10.

Goole.—Slag, etc.—For R.D.C. S., 6, Belgravia.
Hendon.—Road Materials.—For R.D.C. H. W. Rackham, S.
London.—Shingle, etc.—For Hackney B.C. P. Holt, B.E. and S.
London.—Paving Materials.—For Deptford B.C. A. Purkis, T.C.
Middlesex.—Tar, etc.—For C.C. A. Dryland, C.E., Middlesex Guildhall, Westminster, S.W.1.
Middlesex.—Road Materials.—For C.C. A. Dryland, C.E., Middlesex Guildhall, Westminster, S.W.1.

FEBRUARY 13.

Rotherham.—Highway Materials.—For R.D.C. A. E. Lant, E. and S.

FEBRUARY 15.

Folkestone.—Cement,—For T.C. H. O. Jones, B.E.
Gosport.—Highway Materials.—For T.C. B.E.
Manchester.—Bricks.—For T.C. Director of Housing.
Settle.—Highway Materials.—For R.D.C. S. C. Davidson, Highway S.
Southport.—Road Materials.—For C.B. A. E. Jackson, B.E. and S.

FEBRUARY 16.

Tottenham.—Road Materials.—For U.D.C. E. Townson, clerk.

FEBRUARY 17.

London.—Highway Materials.—For Fulham B.C. W. Townend, T.C.

FEBRUARY 18.

Ventnor.—Road Materials.—For U.D.C. S.

FEBRUARY 20.

East Grinstead.—Road Materials.—For U.D.C. E. and S.
Egham.—Highway Materials.—For U.D.C. S. E. L. Bendall, Acting E. and S.

FEBRUARY 22.

Southend-on-Sea.—Highway Materials.—For C.B. H. Dyer, B.E.

FEBRUARY 25.

Barnes.—Roadmaking Materials.—For U.D.C. F. P. Kindell, E. and S.
Brierfield.—Road Materials.—For U.D.C. S.

NO DATE.

Isle of Axholme.—Granite.—For R.D.C. S.

ENGINEERING, IRON AND STEEL.

JANUARY 27.

Merton and Morden.—Cemetery.—Construction of dwarf fencing walls about 250 yds. in length, and brick and stone gate piers, on site at Garth-rd., Lower Morden, for U.D.C. G. Jerram, E. and S. Dep. £1.

JANUARY 28.

Bristol.—Bridge.—Reinforced concrete bridge leading to loading bank, and other works, near Bristol Station, for G.W.R. Engineer, Paddington Station. Dep. £2 2s.

JANUARY 29.

Witham.—Water Supply.—For U.D.C. Pick, Everard, Keay & Gimson, engineers, 6, Millstone-lane, Leicester. Dep. £2 2s.

JANUARY 30.

Llanfyrnach.—Pipes.—Supplying, laying, and jointing of cast-iron and asbestos-cement pipes, approximate lengths 2,850 yds., with hydrant, valves, etc., together with construction of a service reservoir and other contingent works, for Tegryn water scheme, for R.D.C. J. Owen Parry, consulting engineer, Arcade-chambers, Ammanford. Dep. £2 2s.

JANUARY 31.

Mablethorpe and Sutton.—Building.—Pumping station and iron water mains, for U.D.C. Silcock & Simpson, engineers, 25, Victoria-st., Westminster, S.W.1. Dep. £5.

FEBRUARY 2.

Carmarthenshire.—Reconstruction.—Also widening of Cwmbach bridge on Llanelly-Trimsaran road, for C.C. T. W. Wishlade, C.S. Dep. £2.
Dublin.—Sewerage.—Sewerage system, together with sewage lift or ejector, sewage sump and pumping station, cast-iron pumping main between Holmpatrick-terr. and Shinnicks Island, for T.C. P. H. McCarthy, consulting engineer, 26, Lower Leeson-st. Dep. £10.

FEBRUARY 3.

Dublin.—Sewerage.—Sewerage system, together with sewage lift or ejector, sewage sump and pumping station, cast-iron pumping main between Holmpatrick Terrace and Shinnicks Island, for Board of Health. P. H. McCarthy, consulting engineer, 26, Lower Leeson-st., Dublin. Dep. £10.

FEBRUARY 6.

Kirkcaldy.—Bridge.—Construction of steel girder footbridge over railway at Viewforth Gardens, for T.C. B.S.

FEBRUARY 8.

Hayes and Harlington.—Sewage Disposal.—For U.D.C. E. A. Sandford Fawcett, E., 53, Victoria-st., Westminster, S.W.1. Dep. £5 5s.
Northam.—Reservoir.—Concrete service reservoir, laying main, and other work, at Appledore, for U.D.C. W. G. Champion, S. Dep. £2 2s.
Wellington (Salop).—Waterworks.—For U.D.C. E. Sandeman, consulting engineer, 15, Victoria-st., Westminster, S.W.1. Dep. £3.

FEBRUARY 9.

Rochdale.—Bridge.—In reinforced concrete over L.M. and S. Railway at Belfield, for C.B. S. H. Morgan, B.S. Dep. £2.

FEBRUARY 12.

Kingston-upon-Hull.—Demolition.—Of old north bridge and construction of timber quays, etc., for T.C. Herbert Hamer, City E. Dep. £2 2s.

FEBRUARY 15.

Johannesburg.—Bridgework.—1,790 tons of steelwork, troughing, etc., for the new Buffalo River Bridge, East London, for South African Railways and Harbours. Dept. of Overseas Trade, 35, Old Queen-st., London, S.W.1. (Ref. No. G.X. 11007.)
London.—Installation.—Of steam plant, steam and condense mains, gas, water and fire hydrant mains, forced circulation heating and hot water supply apparatus and mains and miscellaneous work at St. Nicholas Hospital, Plumstead, S.E.18, for L.C.C. Chief Engineer, The Old County Hall, Spring-gdns., S.W.1. Dep. £1.
New Delhi.—Pipes.—Hydraulic power pipe line of a total length of 4,354 ft. of steel pipes 16-in. internal diameter, together with bends, specials, valves, etc., for Indian Stores Department. Dept. of Overseas Trade, 35, Old Queen-st., London, S.W.1. (Ref. G.X. 11053.)

FEBRUARY 17.

Middlesex.—Sewerage.—For West Middlesex main sewerage, for C.C. Dodd & Watson, engineers, Wellington House, Bennetts Hill, Birmingham. Dep. £5 5s.

FEBRUARY 18.

Cairo.—Waterworks.—For Egyptian Ministry of the Interior. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. G.X. 10962.)

ROAD, SEWERAGE, AND WATER WORKS.

JANUARY 28.

Edinburgh.—Roads.—New roads and sewers in Niddrie housing area (3rd Development); new roads and sewers in Saughton Golf Course, West of Balgreen-rd., and new fireclay pipe sewers in Brestairig housing area, raigentinny, for T.C. B.E.
Finchley.—Improvements.—To Woodside-lane, for U.D.C. P. T. Harrison, E., 9, The Hawthorns, Regent's Park-rd., Finchley, N.3. Dep. £1.
Hertford.—Paths.—Making-up of new paths and other works connected therewith at Hertford Corporation Cemetery, Bramfield-rd., for T.C. B.S. Dep. £2 2s.
Ilford.—Making-up.—Of Clifton-rd., Cotswold-gdns., Hazelbrouck-gdns., Springfield-drive, South Cross-rd., and Widdecombe-gdns., for T.C. B.E. and S. Dep. £2 2s.
Kilmarnock.—Sewer.—Supply and laying of (1) 405 yds. of 21 in. reinforced concrete pipes; (2) 560 yds. of 18 in. reinforced concrete pipes; (3) 330 yds. of 12 in. fireclay pipes; and (4) other necessary works in connection with drainage of the Dundonald-rd. area, for T.C. W. Dunbar, B.S., Market Bridge.
Kingston-upon-Hull.—Making-up.—(1) The Limes, Ella-st.; (2) Denmark-grove, Holderness-rd.; (3) Wycliffe-Ter., Courtney-st., for T.C. H. Hamer, City E.
Maldon.—Drainage.—Drainage work in connection with 42 houses at Tolleshunt Knights, for R.D.C. W. Almond, S., 6, Market-hill.
Manchester.—Paving.—Sewering, draining, paving (concrete), flagging (artificial flags), etc., Maidstone-av., Withington, from Wilbraham-rd. to Hewlett-rd.; Coram-st., Gorton; Penzance-st., Newton Heath. Sewering, draining, paving (concrete), flagging, Violet-st., Gorton; Arnold-rd., Withington; Willow Bank, Rusholme; passage behind 468, 476, Wilbraham-rd., Withington, for T.C. P. E. Warbreck Howell, T.C. Dep. £1 1s.
Mitcham.—Making-up.—Of Stanford-way in concrete, for U.D.C. S.
Plymouth.—Making-up.—Of Prince Maurice-rd., sect. 2, for T.C. J. Wibberley, City E. Dep. £2 2s.

JANUARY 26.

Southall-Norwood.—Roads.—Drainage and incidental works at depot, Endsleigh-rd., Southall, for U.D.C. J. B. Thomson, E. and S. Dep. £2 2s.

JANUARY 27.

Dagenham.—Asphalt.—Supplying and laying about 2,000 yds. of ballast mastic asphalt on footways, for U.D.C. E. Dep. £1 1s.
Herne Bay.—Making-up.—Of (a) Clifftown-gdns. (part 1); (b) York-rd., for U.D.C. B. J. Wormleighton, S.
North Berwick.—Drainage.—Sewers and extension of outfall sewers, for T.C. Carfrae & Morrison, C.E., 4, Hill-st., Edinburgh. Dep. £1.
Whitworth.—Sewers.—Laying of approximately 570 lin. yds. of 9 in. concrete tube and cast-iron pipe sewers, together with manholes and all appertinent works thereto, for U.D.C. S.

JANUARY 28.

Cardiff.—Drains.—Street improvement works and surface water drains in Kyle-av., Westfield-rd. (part of), Whitchurch; Windsor-rd., Radyr, and Edith-rd. and Stacey-rd., Dinas Powis, for R.D.C. W. Farrow, E. and S.
Congleton.—Pipes.—Laying of about 35 miles of cast-iron pipes and specials from 9 in. in dia. downwards, together with valves, hydrants, meters, etc., for R.D.C. Herbert Lapworth, E., 25, Victoria-st., Westminster, S.W.1. Dep. £5.
Ealing.—Improvements.—Of Uxbridge-rd. by Ealing Common Station, for T.C. W. R. Hicks, B.E.
Lichfield.—Sewage.—Sewage disposal works and laying of rising main at Alrewas, for R.D.C. C. E. Mays, E. Dep. £2 2s.

JANUARY 30.

Bexley.—Making-up.—Of Baldwyn's Park-rd., for U.D.C. G. A. Joy, S. Dep. £2 2s.
Coulsdon and Purley.—Making-up.—Of Farley-rd. (part of), Selsdon, for U.D.C. G. A. Ballard, S. Dep. £1 1s.
Glasgow.—Pipelaying.—Laying of 48-in. steel pipe across Endrick Valley, for T.C. Geo. Henshilwood, Engineer and Manager, Water Department, 50, John-st., Glasgow, C.1.
Romford.—Making-up.—Also sewering of part of Mawney-rd. from Forest-rd to Collier Row-lane, and reconstruction of bridge carrying Mawney-rd. over River Rom and road works connected therewith, for U.D.C. F. G. Beaumont, E. and S. Dep. £4 4s.

FEBRUARY 1.

Bedford.—Making-up.—Of St. Paul's-rd., for T.C. C. H. Blakeway, B.E. and S. Dep. £2.
Fife.—Pipes.—2,270 yds. of 6 in. water main, also trench cutting and laying pipes, from Inverkeithing to Hillend, for C.C. H. F. Hodge, C.E., 34, Viewfield-terr., Dunfermline. Dep. £1 1s.
Formby.—Sewerage.—West-lane area sewerage sections 2, 3, 4, 5, 6 and 7, 2,070 lin. yds. of 9-in. dia. concrete pipe sewer in Timms-lane, Wrigleys-lane, Massams-lane, West-lane, Ryeground-lane and Paradise-lane, for U.D.C. E. Kendricke Gollan, E. and S.
Ilkeston.—Pipes.—Laying of about 1¾ miles of 16 in. and 14 in. cast-iron pipes and specials, with valves, etc., for T.C. H. Lapworth, E., 25, Victoria-st., Westminster, S.W.1. Dep. £3.
Slough.—Making-up.—Of Lascelles-rd. (part of), for U.D.C. A. Bromly, E.

Willesden.—Paving.—Burning-off and laying of 1 in. asphalt carpet in Harlesden-rd., for U.D.C. F. Wilkinson, E. Dep. £15.

FEBRUARY 3.

Carshalton.—Making-up.—Of Barrow Hedges-way; Brambledown-rd.; Hawthorne-av.; Queen Mary's-av., for U.D.C. R. S. Davey, E. and S. Dep. £2.

Wembley.—Dressing.—Surface dressing of roads, for U.D.C. C. R. W. Chapman, E. and S.

Wembley.—Making-up.—Of Sudbury Heights-av. (part 1) and Derek-av., for U.D.C. C. R. W. Chapman, E. and S. Dep. £1 1s. each.

FEBRUARY 4.

London.—Paving.—Forming and paving portion of Westbrook-rd. which extends from Kidbrook Park-rd. to Woodville-rd., for Greenwich B.C. B.E. and S.

Slough.—Sewer.—300 yds. approximately of 9 in. stoneware pipe sewer, with manholes and appurtenant works, in Dennis-way, for U.D.C. A. Bromly, E.

Southend.—Making-up.—Of Agnes-av., Seaforth-grove and back passage, Trinity and Marine-avs., for C.B. R. H. Dyer, B.E. and S. Dep. £1 each road.

FEBRUARY 6.

Manchester.—Sewering.—Also draining, kerbing, flagging and paving (concrete) on roads 1 and 2 and boundary roads on housing estate at Stokes-st., Clayton, for Corporation. City Engineer's Office (Eastern District Surveyor's Department). Dep. £1 1s.

FEBRUARY 8.

Bishop's Stortford.—Extension.—Of sewer and water main, for U.D.C. R. S. Scott, E. Dep. £1 1s.

FEBRUARY 9.

Crewe.—Making-up.—(1) Between Bright-st. and Richard-st (including sewering); (2) rear of 74, Samuel-st. to 23a, Bright-st.; (3) rear of 98-106, Nantwich-rd.; (4) rear of 4-42, Laura-st. (including sewering); (5) rear of 2, Laura-st. to 172, Gresty-rd., for T.C. L. Reeves, B.E. and S. Dep. £2 2s.

FEBRUARY 10.

Birmingham.—Sewerage.—7,650 yds. of brick and concrete, concrete tube and stoneware pipe sewers, about 1,000 yds. of stoneware pipe drains, and incidental works in private lands and various roads at Highters Heath, for T.C. H. H. Humphries, City E. and S. Dep. £2.

Middleton.—Making-up. — With tar-macadam Mossway and Greenway, for T.C. B.E. and S.

FEBRUARY 11.

Preston.—Pipes.—4,500 yds. of 30 in. dia. steel water pipes with bituminous lining and exterior sheathing, for C.B. Water E.

FEBRUARY 25.

Finchley. — Widening. — Improvement works, Woodside-lane; also resurfacing in Woodside-lane, North Finchley, for U.D.C. Percival T. Harrison, E., 9, The Hawthorns, Regent's Park-rd., Finchley, N.3. Dep. £1.

NO DATE.

Hull.—Improvements.—Street works, sewers and footpath works in Barnsley-st. housing site, for Corporation. H. Hamer, City E.

Woking.—Sewer.—For U.D.C. G. Gould Marsland, E. and S. Dep. £21.

Steel Workers' Wage Rates.

The following rates per hour, applying to steel erectors and riveters, have been agreed:—Erectors, London rate, 1s 6½d.; Provincial rate, 1s. 5½d. Riveters, London rate, 1s. 7½d. Riveters' holders-up, London rate, 1s. 7d.

"Factories in England."

Under this title, a finely produced brochure has been published by Welwyn Garden City, Ltd., which should interest the prospective factory builder and, of course, the factory consultant. Other areas than Welwyn are dealt with, and it is frankly pointed out that there are industries for which Welwyn is not suitable and others which are suitable. Some excellent illustrations add force to the text.

L.M.B. Sports Association.

Following is the table up to and including January 16, in connection with the Football League:—

	P.	W.	D.	L.	F.	A.	Pts.
Higgs	11	9	1	1	52	12	19
Trocoll	9	6	1	2	23	15	13
Holloways	3	3	—	—	8	2	6
Scafco	9	3	—	6	12	20	6
Blue Circle	9	2	—	7	14	26	4
Downs	9	1	—	8	10	44	2

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

Adwick-le-Street.—West Riding C.C. acquired site in Windmill Back-lane for grammar school. Plans by H. Wormald, County Hall, Wakefield.

Ambleside.—Co-operative Holidays Association and members of Holiday Fellowship to provide hostel in Lakeland, at £2,000.

Ashington.—U.D.C. instructed S. to prepare scheme for child welfare centre.—U.D.C. to support Bedlington U.D.C. in its application to C.C. requesting improvements to Stakeford Bridge. Cost, £12,000.

Aylesbury.—T.C. approved:—alterations to office, Bicester-rd., Dominion Dairy Co., Ltd.; 6 houses, Milton-rd., E. P. Gilkes.

Batley.—T.C. approved:—reconstruction Temperance Hall, Brunswick-st., Temperance Society,—M.H. sanctioned borrowing of £6,600 for houses at Great Wood-st. and Bank-st., Mount Pleasant.

Bedford.—R.D.C. to erect 52 houses.

Bedlington.—Alterations proposed to Whitley Memorial Schools.

Biggleswade.—Wells & Winch, brewers, High-st., propose extensions to "Crown" hotel.

Billingham-on-Tees.—Roman Catholic community propose school.

Birmingham.—Bournville Village Trust to erect 20 additional houses.

Bishopmill.—E.C. of Moray and Nairn decided to take steps to ascertain most suitable site for school at Bishopmill.

Blackburn.—T.C. approved:—10 houses, off Ramsgreave-drive, E. Ashworth; 12 houses, Parsonage-rd., Russell Bros.

Blackpool.—The District Bank, Ltd., Spring-gardens, Manchester, propose alterations to branch bank in Central-drive. Plans prepared Francis Jones & H. A. Dalrymple, F.&A.R.I.B.A., architects, 178, Oxford-rd., Manchester.

Blyth.—E.C. propose two additional classrooms at Newsham junior school.

Boughton.—Parochial Council of St. Paul's acquired site in Heath-lane for church.

Bradbury.—Compstall Co-operative Society propose stores on Compstall-rd., Romiley.

Bristol.—T.C. leased ground at Totterdown Lock to G.W.R. for improvements to Temple Meads station.—Housing Committee to lease land at Sea Mills estate, Portway, for houses.—Exchange of lands on Hillside-rd. estate, St. George, is to be proposed to facilitate development of estate and adjoining lands.—Strip of land facing Broad-walk, Knowle, for erection of 12 houses by Chard Bros. recommended.

Bungay.—U.D.C. to build 20 non-parlour houses in Flixton-rd.

Bury.—Crown Brewery Co., Ltd., Brewery, Rochdale-rd., propose additions to "Wellington Hotel," Bolton-rd. Plans by H. Barnes, resident architect.

Buxton.—T.C. considering borrow £4,580 for sub-station at Sherbrook.

Cannock.—Plans approved by U.D.C.:—drill hall, Walsall-rd., Bridgtown, Royal Engineers (Territorial Association); entertainment hall, Cannock-wood, Cannock and Rugeley Colliery Co.

Carlisle.—T.C. approved:—8 houses, Rosebery-rd., A. Blakeley & Sons.

Castleton.—Licensing justices approved plans:—alterations to "New Inn," Bluepits, for Bury Brewery Co., Ltd. Architects, A. Puresglove, A.R.I.B.A., 79, Mosley-st., Manchester.

Chester-le-Street.—Co-operative Society are to carry out alterations to central premises. Architects, C.W.S. Architects' Dept., 90, Westmoreland-rd., Newcastle-on-Tyne.

Chesterfield.—T.C. approved:—5 houses, Brockwell-lane, A. Heath; extension to printing works, Mill-st., Wilfred Edmunds, Ltd.

Colne.—Board of Management of Colne Maternity Home propose additions to institution, at £4,500. Plans by T. H. Hartley, B.E.

Congleton.—Housing Committee decided to negotiate for site off Waggs-rd. for 50 houses.—Council also selected land, adjoining present housing scheme in Bromley-rd., for building of another 50 houses.

Conisborough.—U.D.C. acquired site for extensions to swimming baths. Tenders invited.

Consett.—It is proposed to erect church and church schools, for Roman Catholic community, at £20,000.

Coulsden and Purley.—Rough estimate for reconstruction of bridges in Marlpit-lane, is £2,000.—Plans passed: R. Costain & Sons, 54 pairs semi-detached houses, Croham Heights estate, (Sanderstead portion); P. Richardson, 5 pairs semi-detached bungalows and garages, Woodlands-grove, Coulsdon.

Coventry.—Building Committee of Coventry Working Men's Club, 54, Cox-st., propose additions to premises. Plans by G. Cave, L.R.I.B.A., City Chamber, High-st.

Darlaston.—C. W. D. Joynson, S., to prepare plans for 20 houses off Willenhall-st.

Darlington.—T.C. approved:—W. Lyall, 4 houses, Aysgarth-rd.; C. W. Milburn, mortuary block, Darlington Memorial Hospital, Greenbank-rd. North Back.

Denton.—U.D.C. propose 62 additional houses on housing site. J. B. Cooke, S.

Derby.—Naylor, Sale & Woore, FF.R.I.B.A., architects, St. Mary's-chambers, St. Mary's-gate, for vicarage adjoining Quarndon Parish Church, Cost, £1,850.

Dewsbury.—Borough Architect and Surveyor submitted scheme for adaptation of portion of premises formerly used as laundry at old infirmary as disinfecting station at £450.

Dorking.—U.D.C. approved: Alterations, "Ram Inn" and "Surrey Yeoman," for Friary, Holroyd & Healy's Breweries, Ltd.; alterations, "Wheatsheaf," for Mellersh & Neale.

Dublin.—Hollies-st. Maternity Hospital to be rebuilt. Tenders invited shortly.

Easington Colliery.—No contract placed for miners' hall and institute for which Hays & Gray, Camden-st., North Shields, are architects.

Edinburgh.—Plans passed for extension to St. Christopher Catholic School, E. J. MacRae, architect, High-st.: demolition, reconstruction and extension to warehouse and offices, etc., at 28, King's Stables-rd., for Lawrie Bros., Ltd., G. Wood, architect, 73, George-st.; reconstruction and booking offices at Leith Walk passenger station, W. Fraser, architect, 23, Waterloo-place; storage accommodation at 52, Lorn-st., Leith, W. Swan, architect, 105, Pitt-st., Leith; reconstruction and extension of Church of Scotland offices, 117 to 121, George-st., Auldjo, Jamieson & Arnott, architects, 17, Young-st.; extension and additions to the Catholic School of St. Cuthbert's, Slateford-rd., E. J. MacRae, City Architect.

Ellesmere Port.—U.D.C. propose covered market, S. prepared plans. Cost, £8,000.

Flixton.—P.C. approved plans for proposed swimming and slipper baths for Urmston U.D.C. and Flixton and Davyhulme Parish Councils at Princess-rd., Flixton.

Folkestone.—T.C. approved: 4 houses in Joyes-rd. and 8 in Greenfield-rd., for A. J. A. Smith.

Gateshead.—T.C. approved:—Newcastle Breweries, Ltd., alterations, "Borough Arms" public-house, Bensham-rd.; J. Taylor, 14 houses, Saltwell-rd.; County of Durham Electrical Power Distribution Co., Ltd., extension, sub-station, Abbot-st.; Kirk & Dickinson, 26 houses, Back Earls-drive.

Gateshead-on-Tyne.—Consideration been given to scheme for modernising High Teams Public Institution. Work to cost about £40,000.

Giffnock.—Plans approved:—119 houses, J. Lawrence (Glasgow), Ltd., at new roads, Melford and Bullock-avs. J. Wilson, architect, 141, Bath-st., Glasgow.

Glasgow.—Corporation considering granting ground at Warriston-st., Carntyne housing scheme, for shops by J. Parker, Ltd., Riddrie, Bridgeton.—Corporation considering health centre at Glenbar and Rhymer-sts., Garngadhill, from plans by Thomas Gilmour, City Architect.—Offers wanted for erection transformer sub-station at Springburn pumping station. G. Hinchelwood, Water Engineer and Manager. Plans coming before Dean of Guild Court: reconstruction and additions to the Grove Picture House, New City-rd., Charles McNair, architect, 112, Bath-st.—Four-story building and basement, for W. Milne, ice merchant, at Old Wynd, McWhannell & Reid, architects, 233, West Regent-st.—12 shops, etc., at Anniesland Cross, Great Western-rd., H. Barnes, architect, 2, Richard-st.—New shop premises at Carntyne-rd., D. Cameron, architect, 163, West George-st.—Reconstruction and business premises at Union-st., Ardath Tobacco Co., Ltd., J. Everton, architect, 134, Regent-st., London.—Corporation to erect new building at £20,000 at St. Enoch's-sq. Thomas Somers, City E.—Corporation propose acquiring ground at Balfour-st., Maryhill, for housing scheme.—Corporation to erect garage at Butterbiggins-rd.—Corporation to carry out extension and reconstruction at Southern General Hospital at £12,000. Kitchen and Stores Department. Thomas Somers, Master of Works.

Gravesend.—T.C. approved:—H. L. Smith, 8 houses at Central-av., W. E. & H. E. Thomas, Ltd.; T. Bennett, 7 houses and 2 garages, Central-av., S. Bridger.

Hailsham.—R.D.C. approved: Electricity sub-station, Green's factory, for Eastbourne Corporation; electricity sub-station at Horsebridge, Hellingly, for Weald Electricity Supply Co.

Halesworth.—U.D.C. approved scheme proposed by Industrial Builders, Ltd., for erection of more houses.

Harwich.—T.C. to invite tenders for 8 chalets at Dovercourt.

Hatfield.—Barnsley Brewery Co., Ltd., propose hotel, subject to approval.

Hathersage.—The Catholic Authorities propose restoration of Padley Chapel, at £1,500.

Hawarden.—R.D.C. propose 176 houses.

Heckmondwike.—Chippendale & Edmondson, 1a, Hustlergate, Bradford, architects for additions at Flush Mills, for T. F. Firth & Son, Ltd.

Heston-Isleworth.—Libraries Committee to submit estimates to U.D.C. for two new libraries to cost £12,000 each.

*See also List of Contracts, Competitions, etc.

Heywood.—Members of St. Joseph's R.C. Church acquired Bagslate British School and land at Bamford for mission chapel.

Highfield.—R. Burke, 12, Grey-st., Newcastle-on-Tyne, architect for R.C. school.

Hinckley.—Atkins Bros. to have new warehouse premises erected in Regent-st. Plans by Lt.-Col. E. C. Atkins, architect, Stretton House, Stretton Baskerville.

Holyhead.—U.D.C. propose 27 houses. T. Thomas, L.R.I.B.A., architect, 4, Porthylen-rd.

Hunslet.—Bentley's Yorkshire Breweries, Ltd., Woodlesford Brewery, near Leeds, proposing to rebuild Midland Hotel, Woodlesford. Architects, W. H. & A. Sugden, Devonshire-buildings, North-st., Keighley.

Huntington.—Staffs E.C. to proceed with a scheme for junior and senior schools at Huntington at £9,570.

Irlam.—Members of Parish Church propose chapel, at £4,000. Vicar, Rev. Wm. Lees.—Permanent school proposed for St. Teresa, Liverpool-rd. Rev. J. S. Lineen. Architect, Wm. Ellis, 49, Deansgate, Manchester.

Keighley.—Premises in South-st. for Co-operative Society Ironworks, Ltd., of Goulborne-st. Plans prepared by Architects' Department, C.W.S., Ltd., 1, Balloon-st., Manchester.

Kidderminster.—T.C. approved: Lacey Bros., 6 houses and a new road and sewer off Sutton Park-rd.; J. Hanson & Sons, alterations, "Raven Inn," Bromsgrove-st., and "Albion Inn," Broad-st.

Lancashire.—E.C. propose secondary school in Prestwich. Stephen Wilkinson, F.R.I.B.A., 16, Ribbledale-place, Preston.

Largs.—Store and garage in Terrace-rd. for Greenock Central Co-operative Society, Ltd., 5, Boyd-st.

Leigh.—T.C. approved new school for 320 boys in Etherstone-st. at £25,000.

Liverpool.—C.E. Authorities proposing church hall at Fairfield

Liverpool.—Plans passed by T.C.:—licensed premises, "The Cattle Market Inn," Prescot-rd., Stanley, A. E. Shennan, for Bent's Brewery Co., Ltd.; 9 shops, public library and assembly hall, Longmoor-lane, for Corporation; wood-frame school, Winstone-lane, for Corporation; 6 houses, Druids Cross-gardens, H. C. Davies, for W. Williams & Dawson; 12 houses, Wheatcroft-rd., T. Wainwright & Son, for J. Davies & Son; 40 houses, Stairhaven-rd., A. E. Shennan, for Heathside Estates, Ltd.; large alteration and addition to works, Smithdown, lane, Oscar Faber, for Milner Safe Co., Ltd.; alteration and addition to 23, Islington, T. Price & Sons, for Pathe Pictures, Ltd.; 18 tenements, Burlington-st., and 18 tenements, Eldon-st., for Corporation; canteen, Vale-rd., corner of Rodick-st., Medcalf & Medcalf, for Howard Ford & Co., Ltd.; new boxing stadium, St. Paul's-sq., Kenmure Kinna, for Stadium (Liverpool), Ltd.; alteration to Belmont Institute, Belmont-rd., Corporation; 14 houses, Pinfold-rd., O. Williams & Sutcliffe, for Hunts Cross Building Co.; factory premises, Lorenzo-drive, G. Bradbury & Sons, for H. G. Hughes; mortuary, etc., Hahnmann Hospital, Hope-place, Campbell & Honeyburne, for Committee; additions to rubber works, Rice-lane, F. Morton & Co., Ltd., for Dunlop Rubber Co., Ltd.; 10 houses, Monkswell-drive, Wavertree, Richard Owens & Son, for G. E. Williamson; laundry premises, Longmoor-lane, Isaac Dixon & Co., Ltd., for the Lotus Laundry Co., Ltd.,; 7 houses, Cleveley-rd., E. M. Bellis, for Amalgamated Properties, Ltd.; 5 houses and shops, Mill-lane, Wavertree, H. L. Beckwith, for Mrs. G. F. Cooke; cinema, Prescot-rd., corner of Somerfield-rd., A. E. Shennan, for R. Wilkinson.

London (Bermondsey).—B.C. recommend £12,000 for 20 flats, block 5, Vauban-st. scheme.—£825 is to be borrowed for acquisition of 250 and 252, Rotherhithe-st. for housing purposes.—£10,000 is also to be borrowed for Rotherhithe-st. (East) clearance scheme.

London (Fulham).—B.C. recommend scheme for widening Fulham-rd. outside 555-561 be proceeded with; and B.S. be instructed to obtain tenders for demolition of buildings, clearing and levelling of site, and setting back of frontage line to new improvement line.

London (Lewisham).—B.C. approved: C. Durbin, shops, corner of Burnt Ash-hill and Kingrand-rd.; J. P. Briggs, garages abutting upon Old-rd., Lee; R. B. Rowell, houses, Perry Rise estate; E. Bates, additional garages, Avondale-rd., Bromley Hill; J. W. Heath & Sons, 16 houses, Henryson-rd.; R. B. Rowell, 10 houses, De Frene-rd.; H. R. Watt, 10 houses, Callander-rd.; W. J. Scudamore, Ltd., 8 shops, Baring-rd.; W. J. Scudamore, Ltd., 48 houses and garages, new road leading from St. Mildred's-rd. to Baring-rd.

Longbenton.—Site been obtained for church and hall, near junction of Wallsend-rd. and the Coast-rd. Vicar, Rev. M. Fletcher.

Luton.—T.C. approved:—Bontwood & Lyon, extension of factory, 5, Dudley-st.; W. J. Wells & Sons, 3 shops and houses, Bishopscote-rd.; P. Butterfield, 5 houses Colin-rd.

Manchester.—Plans approved by T.C.:—A. E. & R. Lewis, 68, Mather-st., Fallsworth, 6 houses, Asheton-rd., Culcheth-lane and Christopher-st., Newton Heath; D. Winter & J. Fielding, Bolshaw-lane, Handforth, 18 houses, Winfield-av. and Kingsway-rd., Moss Nook, Northenden; G. Hudson, 5, Hilltop-av., Blackley, 18 houses, Claxton-av., Blackley; Corporation, 64 houses, Stokes-st., Powell-st., Blackpool-st. and Cooper-st., Clayton; W. Meredith, 90, Birchfields-rd., Rusholme, 20 houses, Egerton-rd., Derby-rd. and Beech-grove, Rusholme; Clowes & Williams, The Nurseries, Burton-rd., Withington, 13 houses, Sandhurst-av. and Albemarle-rd., Withington; A. Whittaker, 2, Park-rd., Northern Bichells, 8 houses, Mount-grove and Park-rd., Northern Bichells; T. H. Halsall, 360, Cheetham Hill-rd., 16 houses, Durley-av. and Church-st., Cheetham, and 10 houses on Blue Stone-rd., Moston.

Manchester.—Rev. Father Wearden, 361, Claremont-rd., Rusholme, proposes school for "St. Kentigern," Yew Tree-rd., Rusholme. Plans by H. A. Yearsley, 7, Oxford-st.

Marsh.—Catholic Authorities propose mission church. Canon E. Lupton, P.P.

Mexborough.—West Riding C.C. propose new infants' school at £3,000, and additions to Wood-house grammar school at £500. Plans by H. Wormald, County Hall, Wakefield.

Middlesbrough.—T.C. approved:—14 semi-detached houses, Ida-rd., off Ormesby-rd., J. W. Emerson.

Minehead.—U.D.C. considering new housing proposal.

Neath.—R.D.C. to apply to M.H. for sanction to erection of further 50 houses.—Negotiations for land for houses at Glyn-Neath, Clyne, and Jersey Marine been completed.

Newbiggin-by-the-Sea.—U.D.C. approved alterations to "Sea View Inn."

Newburn-on-Tyne.—U.D.C. to buy Walbottle Dene, Throckley, at £7,000. The estate will be utilised as site for working class dwellings.—The U.D.C. passed plans for sub-station at Westerhope, for Newcastle and District Electric Lighting Co.

Newcastle.—Staffs County Public Assistance Committee approved plans and estimates for conversion of Newcastle institution into a hospital with 400 beds, also plans and estimates for conversion of Wordsley institution into hospital with similar number of beds. Estimates: £68,000 for Wordsley, and £175,000 for Newcastle.

Newcastle-on-Tyne.—Bradburn, Ltd., 64, Northumberland-st., to erect premises. No architect appointed.—It is proposed to transform premises at 38, Great North-rd. into social centre for Roman Catholics. Particulars from McCormack, of St. Michael's Parish, Newcastle.

Newmarket.—R.D.C. decided to ask M.H. for approval to purchase of housing site at Burwell.

Newton Abbot.—R.D.C. received M.H. approval to 4 houses at Broadhemston and 8 at Torbrian.

Oldham.—Health Committee propose laboratory at Boundary-park hospital. Architects, C. T. Taylor, Roberts & Bowman, A.&L.R.I.B.A., 10, Clegg-st.

Oxford.—T.C. approved: 78 houses, Rose Hill estate, N. Moss & Son, Cowley; 4 houses, Williamst., New Marston, R. Hodges, Northfield-rd., Headington; 14 houses, Wilkins-rd., Cowley, A. E. Harris, Raglan-st., Coventry; parochial buildings, New-Inn-Hall-st., The Trustees, Wesleyan Church, New-Inn-Hall-st.; 7 houses, George-st., Cowley, Browning Bros., Leicester; extensions, Wingfield Hospital, The Committee, Wingfield Hospital.

Paisley East.—Renfrewshire Housing Committee approved plans for 17 houses at Gallowhill-rd. and Arkeiston-crescent. David S. Lang, architect, 90, New-st., Paisley.

Poole.—T.C. approved: Extension to office and covered van park, Oxford's Bakery, Hardy and Queen's-rds., C. C. Bethell for Oxfords (Hants), Ltd.; alterations, 56, High-st., International Tea Co. Stores, Ltd.; extension to St. Aldhelm's parish hall, Poole-rd., Rev. F. P. Crosse; meeting hall, Chapel-rd., Parkstone, A. N. Patterson for J. W. Miller.

Portsmouth.—T.C. approved: A. W. Mills, lock-up garages, Lennox-rd., N.; C. Hibberd, 6 houses and garages, Penarth-av., Cosham; John Lay & Co., Ltd., for Clarence Esplanade Pier Co., additions, Clarence Pier, Southsea; Reading & Co., motor workshop and showrooms, London-rd., Hilsea; S. J. Todd, 8 houses, Stanley-av.

Preston.—Additions proposed to schools at Ribbleton for Rev. J. Fleming, Church of Blessed Sacrament.

Reading.—T.C. are negotiating for site for proposed new secondary school at Caversham.

Rotherham.—R.D.C. received formal sanctions of M.H. to borrowing £8,304 for 27 houses at Bramley.

Scarborough.—Vicar of Scalby to acquire site from Corporation in Burniston-rd. for church.

Seaham Harbour.—U.D.C. to erect 120 houses at rear of Princess-rd., to plans by the E. and S.—P.C. to erect public convenience at foot of Mill Bank, for £400.

Solihull.—Plans passed by R.D.C.:—52 houses, Yoxall-rd., Ultra Modern Structures, Ltd; 3 pairs of houses, Wagon-lane, A. Hemming & Sons, Ltd.

South Yorkshire.—Further extensions to be carried out at St. Catherine's Colony for Mentally Deficient.

Sprotborough.—John Williams acquired site at Melton-rd. for hotel.

Stainforth.—H. Plewes, architect, to prepare plans for mortuary in Stainforth burial ground.

Stockport.—T.C. propose extension of ladies' plunge bath in St. Petersgate baths.—Lay-out plans approved for development of Broadstone-rd. S. F. Radford propose 12 houses, Broadstone Hall-rd.

Stockton-on-Tees.—E.C. acquired site at Hartburn for school. Plans by Borough Architect.—T.C. to erect 172 houses on Sunderland Glebe estate to plans by P. Stanley, Borough Architect.

Stretford.—U.D.C. inviting tenders for decorations to 194 houses in King's-rd. and Derbyshire-lane West.—Plans passed: 36 houses, Park-rd., J. W. Maunders; 6 houses, Davyhulme-rd. East, McLellan & Abel; office, 67, Stanley-rd., G. R. Gibbons; alterations to shop, 218, Derbyshire-lane West, Eccles Co-operative Society.

Sunderland.—Contract not yet placed for improvements at Grand Hotel, Architects are Cowe & Lawson, Central-chambs., Chester-le-Street.—Tenders not yet invited for alterations to Wheatsheaf Hotel. Architect, F. Caws, 22, Fawcett-st.—Sanction received by T.C. to borrow £1,500 for acquisition of site for swimming baths.

Taunton.—T.C. approved: 6 semi-detached houses, Greenway estate, R. Rendell.

Twickenham.—T.C. approved sketch plans by T. F. Ingram, on behalf of Whitbread & Co., Ltd., for licensed premises at corner of Staines and Sixth Cross-rds

Wakefield.—E.C. propose extensions to Eastmoor Council school at £10,000.

Warrington.—Additional maternity accommodation proposed at Borough General Hospital.

Washington.—Application made to M.H. for £1,600 for additional land for 150 houses on U.D.C.'s Heworth-rd. scheme, and £20,178 for the erection further 50 on same site.

Wellingborough.—U.D.C. received M.H. intimation he would be prepared to approve 138 houses at Roberts-st.—Plans approved of 8 houses, Westfield-rd., C. Adams & Co.

West Hartlepool.—Schools proposed for St. Joseph's, Hutton-av., by Catholic Authorities.

West Kesteven.—R.D.C. propose 12 houses at Great Gonerby and 12 at Colsterworth.

West Lancashire.—R.D.C. approved:—2 pairs houses, Liverpool-rd., Maghull, J. E. Hopwood; 4 pairs bungalows, Turning-lane, Scarisbrick, Wm. Woodeson.

Worthing.—T.C. approved: 8 houses, Wallace-av., W. Brookes, per J. E. Lund; 12 houses, Greenland-rd., J. Francis, per H. M. Potter; 8 flats and 4 garages, Lansdowne-rd., A. W. Clements, per M. R. Fletcher; 6 houses and garages, Wallace-av., W. Brookes, per J. E. Lund; 40 houses, Lavington-rd. and Broomfield-av., E. J. Woodward, per H. M. Potter; 30 lock-up garages rear Malvern-close leading to Brighton-rd., R. Hasler, per A. T. W. Goldsmith.

Yarmouth.—Olley & Haward, architects, called attention to dangerous condition of iron railings round St. Peter's Church. B.E. estimated work at £221.

FIRE.

Godalming.—Eashing Flock Mill, near old river bridge at Eashing, been destroyed by fire. Damage estimated at £10,000.

CALENDARS.

We acknowledge with thanks the receipt of calendars from the Norris Warming Co., Ltd.; Messrs. Chas. P. Kinnell and Co., Ltd.; Mr. Lewis E. Nunn; Messrs. Clark, Hunt and Co., Ltd.; the Orient Line; the Delziel Engineering Co.; Messrs. Knowles, East and Co., Ltd.; United Steel Companies, Ltd.; Messrs. H. Cox and Sons, Ltd.; Messrs. E. B. Holmes and Co., Ltd.; Lloyds' Bank Staff Magazine; Messrs. Larkin Bros., Ltd.; and the Tunnel Portland Cement Co., Ltd.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

[PRINCIPAL CHANGES OF THE WEEK.—No changes are recorded this week.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at King's Cross	2 11 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 13 3	Bo. Bullnose	9 15 0
Do., Bullnose	3 5 3	Blue Wire Cuts	7 5 0
White Midhurst Facing Bricks (deliv. on London site)			5 0 0

Best Stourbridge Fire Brick:—
2½ in. ..... 8 11 0 3 in. 10 3 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretcher	21 0 0	D'ble Str'tch'rs	29 10 0
Headers	20 10 0	D'ble Headers	26 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	One Side and two Ends	30 10 0
		Two Sides and one End	31 10 0
		Splays, and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	1 11	3 in. per yd. super	2 9
2½ in. „ „	2 4	4 in. „	3 6

	s. d.	
Thames Ballast	8 0 per yd	delivered 2 miles radius Paddington
Pit Sand	11 0 „ „	
Thames Sand	11 0 „ „	
Best Washed Sand	11 6 „ „	
½ in. Shingle for Ferro-Concrete	8 6 „ „	
¼ in.	11 0 „ „	
½ in. Broken Brick	10 6 „ „	
Pan Breeze	8 0 „ „	

Per ton delivered in London area in full van loads.

Best Portland Cement. British Standard Specification. Test

In Jute Sacks (11 to ton)	£2 4 9	to	£2 6 9
In Free Paper Bags (20 to ton)	2 6 0	to	2 8 0

Alongside Vauxhall in 80 Ton Lots

Jute Sacks (11 to ton)			1 17 9
Free Paper Bags (20 to ton)			1 19 0
Ferrocrete per ton extra on above			0 7 6
Vitocrete per ton extra on above			0 7 6
Lightning Brand Aluminous Cement in Jute Sacks (20 to ton)	5 2 9	to	5 3 3

NOTE.—Jute Sacks are charged 1s. 6d. each and credited 1s. 6d. each nett if returned in good condition within three months carriage paid.

Super Cement (Waterproof)	3 12 0
Ciment Fondu (F.O.R. Works)	4 15 0
Roman Cement	6 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
„ „ Pink	5 10 0
Plaste, Coarse, Pink	3 0 0
„ „ White	3 12 6
„ Fine	4 12 0
Siraplite, Coarse	3 9 0
„ Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s 6d. if returned in good condition with in three months carr. pd.

Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

	s. d.
BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 10
BEER STONE—RANDOM BLOCK— Free on rail at Seaton Station per ft. cube	2 3
Delivered free on rail Nine Elms, S.R., per ft. cube	3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.	
PORTLAND STONE— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4½
Do. do. delivered on road wagons at above stations, per ft. cube	4 5½
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
CHILMARK—RANDOM BLOCK— At Nine Elms, per ft. cube	3 11
HOPTON-WOOD STONE— F.O.R. Quarries, Wirksworth, Derbyshire,	s. d.
Random blocks from 10 ft. and over P. ft. cb.	14 0
Sawn two sides „	22 6
Sawn three or four sides „	27 0
YORK STONE, BLUE—*Robin Hood Quality.* Delivered at any Goods Station, London	
6 in. sawn two sides landings to sizes (under 30 ft. super) Per ft. super	5 6
6 in. rubbed two sides, ditto	6 0
3 in. sawn two sides slabs (random sizes)	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes)	3 6½
1½ in. to 2 in. ditto, ditto	3½
HARD YORK— Delivered at any Goods Station, London. Scappled random blocks Per ft. cube	s. d. 6 6
6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super	5 1½
6 in. rubbed two sides, ditto „	6 1½
4 in. sawn two sides slabs (random sizes) „	3 1½
3 in. ditto ditto „	2 8
2 in. *self-faced* random flags Per yd. super	6 0

CAST STONE

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£24 10	3 × 6	£17 0
4 × 9	20 0	3 × 11	19 10
4 × 8	20 0	2 × 11	19 10
4 × 7	18 0	3 × 9	19 10
3 × 8	18 0	2½ × 9	19 10
3 × 7	18 0	3 × 4½	17 10
2½ × 7	18 0	3 × 4	17 10

PLANED BOARDS.

1 × 11	£22 10	1 × 9	£21 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	16/-	1½	25/-
¾	17/-	1¾	27/6
1	20/-		

TONGUED AND GROOVED FLOORING

Inches	per sq.	Inches.	per sq.
1	21/-	¾	15/-
1½	26/-	¾	16/6
1¾	27/6	1	20/-

Ins. BATTENS.	s. d	SAWN LATHS.	s. d.
¾ × 2 per 100 ft.	2 0	Per bundle	2 3

1 INCH AND UP THICK.

Average price for prime quality.

	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 15 0
Dry American and/or Japanese Figured Oak, per ft. cube	0 12 0
Dry American and/or Japanese plain Oak, per ft. cube	0 10 0
Dry sq. edged Honduras Mahogany, per ft. cube	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube	0 16 0
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube	0 10 0
Best Scotch Glue, per cwt.	£4 10 0 to —
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	30 0 0	18 by 10	16 10 0
22 by 12	26 10 0	18 by 9	14 12 6
22 by 11	24 10 0	16 by 10	14 5 0
20 by 12	24 0 0	16 by 8	11 0 0
20 by 10	20 2 6		

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons. Per 1,000. f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district	£4 10 0
ditto hand-made ditto	5 3 6
Ornament 1 ditto	5 8 8
Hip and valley tiles { Hand-made	0 9 6
(per dozen) { Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—	
R.S. Joists, cut and fitted	£11 0 0
Plain Compound Girders	12 0 0
„ „ Stanchions	15 0 0
In Roof Work	18 0 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ¾ in.	10 15 0
⅜ in.	11 0 0	⅞ in. to 2¼ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes.		Fittings.		Flanges.	
	Wrought Mild Steel.	Genuine Staffs. Iron.	⅛ in. and under.	Over ⅛ in.	⅛ in. and under.	Over ⅛ in.
	%	%	%	%	%	%
Gas	62½	50	45	47½	55	57½
Water	58½	46½	40	42½	50	52½
Steam	55	42½	35	37½	45	47½
Galv. gas	50	37½	35	37½	45	47½
Galv. water	45	32½	30	32½	40	42½
Galv. steam	40	27½	25	27½	35	37½

*C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	10d.	7½d.	2½d.
3½ in.	10½d.	8½d.	2½d.
4 in.	10½d.	9½d.	2½d.
4½ in.	11½d.	10½d.	2½d.
5 in.	1/1½	11½d.	3½d.

*O.G. GUTTERS.

3 in.	1/0	10½d.	2½d.
3½ in.	1/0½	10½d.	2½d.
4 in.	1/1½	10½d.	2½d.
4½ in.	1/2½	1/0½	2½d.
5 in.	1/5	1/2½	3½d.

*RAIN-WATER PIPES, &c.

Per yd. in 6 ft. Pipe.	Bends, stock Branches, angles, stock angles.	
2 in. plain	1/2½	9½d. 1/2
2½ in. „	1/3	10½d. 1/4
3 in. „	1/6½	1/5½ 1/6½
3½ in. „	1/11	1/4½ 1/11½
4 in. „	2/2½	1/7½ 2/4½

*The above R.W. Goods prices are subject to an advance of 5% from October 29th, 1929.

L.C.C. COATED SOIL PIPES—London Prices ex Works

	Bends, stock Branches, Pipe, angles, stock angles.	
	s. d.	s. d. s. d.
2 in. per yd. in 6 fts. plain	2 1½	1 6½ 1 10½
2½ in. „	2 6	1 8½ 2 4
3 in. „	2 8	1 10½ 2 9½
3½ in. „	2 10½	2 4 3 3
4 in. „	3 3	2 7½ 3 9

L.C.C. COATED DRAIN PIPES—London Prices ex Works

	Bends, stock Branches, Pipe, angles, stock angles.		
	s. d.	s. d.	s. d.
2 in. per yd. in 9 ft. lengths	3 6	4 3	6 8
4 in. cwt. qr. lbs.	1 1 20	4 0	5 2 8 10
5 in. „	1 2 22	6 3	9 0 14 3
6 in. „	2 0 6	6 11	10 11 16 1

Gaskin for jointing 41/- per cwt.

	Per ton in London.		
IRON—	£ s. d.	£ s. d.	£ s. d.
Common bars	10 10 0	to	11 0 0
Staffordshire Crown Bars	10 15 0	to	11 10 0
Good merchant quality Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	9 10 0	...	10 0 0
Steel Bars, Ferro-Concrete quality, basis price	8 0 0	...	9 0 0
Hoop iron, basis price	11 0 0	...	12 0 0
„ Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—			
Ordinary sizes, to 20 g.	11 0 0	...	11 10 0
„ „ „ 24 g.	12 0 0	...	13 0 0
„ „ „ 26 g.	14 0 0	...	15 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	13 10 0	...	14 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	14 10 0	...	15 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	17 10 0	...	18 10 0
No. 1 quality £4 per ton extra.			
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes 6 ft. to 9 ft. to 20 g.	13 0 0	—	14 0 0
Ordinary sizes 6 ft. to 9 ft. to 22 g. and 24 g.	14 10 0	...	15 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	16 10 0	...	17 10 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	18 0 0	...	19 0 0
Best Soft Steel Sheets. 22 g. and 24 g.	20 0 0	...	22 0 0
Best Soft Steel Sheets, 26 g.	21 10 0	...	23 0 0
Cut Nails, 3 in. to 6 in.	15 0 0	...	16 0 0

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

COPPER.

	s. d.
Seamless Copper tubes (basis) per lb.	0 9½
Strong sheet „	0 10
Thin „	0 11
Copper nails „	1 0
Copper wire „	0 11

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
29/- 45/- 76/- 153/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
41/6 62/- 92/- 174/- 300/- 588/- per doz

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in. ¾ in. 1 in.
39/6 60/- 116/6 per doz.

CAPS AND SCREWS.

1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.

1¼ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES S.F.

½ in. ¾ in. 1 in. 1¼ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1¼ in. 1½ in. 2 in. 3 in.
6 lbs. P. traps ... 33/- 41/- 56/- 101/- per doz.
8 lbs. S. traps ... 35/- 45/- 66/- 126/- „

TIN.—English Ingots, 1/7 per lb. SOLDER.—Plumber's 9d., Tinmen's 10d., Blowpipe 11d. per lb.

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*The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—(*cont.*)

LEAD, &c.

(Delivered in London.)

	£ s. d.
Lead—Sheet, English, 4 lb. and up	23 10 0
Pipe in coils	24 0 0
Soil pipe	27 0 0
Cesspe pipe	27 10 0

Work.—Country delivery, 20s. per ton extra; lots under 3 cwt. 2s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 5s. cwt. extra.

Old lead, ex London area, at Mills ..... per ton	£13 10 0

PAINTS, &c.

		£ s. d.
Raw Linseed Oil, in pipes	per gallon ...	0 1 9
" " " in barrels ...	" ...	0 1 11
" " " in drums ...	" ...	0 2 2
Boiled " " in barrels ...	" ...	0 2 3
" " " in drums ...	" ...	0 2 5
Turpentine in barrels	...	0 4 6
" in drums (10 galls.)	...	0 4 8
Genuine Ground English White Lead, per ton		47 10 0

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

Genuine White Lead Paint.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morgansewyte," "Polseco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5 cwt. lots. £ s. d.
per ton delivered ... 63 10 0

Red Lead, Dry (packages extra) ...	per ton	33 0 0
Best Linseed Oil Putty	per cwt.	0 13 6
Size. XD quality	fkn.	0 3 0

GLASS.

English sheet glass in crates of stock sizes.

	Per ft.		Per ft.
15 oz. fourths ...	2½d.	22 oz. fourths	7½d.
15 " thirds ...	2¾d.	32 " thirds	9¾d.
21 " fourths ...	3½d.	Obscured Sheet, 15 oz.	3½d.
21 " thirds ...	4¼d.	" 21 oz.	4¾d.
26 " fourths ...	4¾d.	Fluted, 15 oz. 7d., 21 oz.	9½d.
26 " thirds ...	7¼d.	Em'lled, 15 oz. 4¼d., 21 oz.	6d.

Extra price according to size and substance for squares cut from stock.

English rolled plate in crates of stock sizes.

	Per ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
Rough rolled	6½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Ditto, tinted	8d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

"Vita" glass.	Per foot. s. d.
Clear sheet—not exceeding 1 foot	1 0
Do. do. 2 feet	1 3
Do. over 2 feet	1 9
Polished plate—not exceeding 1 foot	1 6
Do. not exceeding 2 feet	3 0
Cathedral—not exceeding 1 foot	1 0
Do. larger sizes	1 6
Horticultural—for greenhouses, etc. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1 0
3/16 in. Wired Georgian Design. Sizes up to 106 inches long by up to 24 inches wide.....	2 6

VARNISHES, &c.

		Per Gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Opal Carriage	ditto	1 4 0
Best ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 6
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 0
Hard Drying Oak	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 6
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 12 6
Best ditto	ditto	1 2 6
Best Japan Gold Size		0 12 0
Best Black Japan		0 10 0
Oak and Mahogany Stain (water)		0 12 0
Brunswick Black		0 7 0
Berlin Black		0 14 0
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers to Terebene		0 9 0
Cuirass Black Enamel		0 7 0

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'‡ Bricklayers'† Plasterers'.†
Aberdeen	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/8½
Airdrie	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Alexandria	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Arbroath	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Ayrshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Bathgate	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2 1/3
Berwickshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Bo'ness	1/7	1/7	1/7	1/8	1/7	1/7	1/7	†1/2½
Broughty Ferry	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Clackmannanshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Coatbridge	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Dumbartonshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Dumfries	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Dumfriesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Dundee	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Dunfermline	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Dunoon	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
East Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Edinburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Falkirk	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Forfarshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Fort William	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/2
Galashiels	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Glasgow	1/7	1/7	1/7	1/8½	1/7	1/7	1/7	1/2½
Greenock	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	‡1/2½ †1/2½
Hawick	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Helensburgh	1/7	1/7	1/7	1/8½	1/7	1/7	1/7	‡1/2½ †1/2½
Inverness	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	10d.–1/2
Inverurie	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7	1/2
Kilmarnock	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Kincardineshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Kinross-shire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Kirkcaldy	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Kirkwall	1/5	1/5	1/5	1/6	1/5	1/5	1/7	1/–
Lanarkshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Leith	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Midlothian	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	‡1/2½ †1/2
Peeblesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Perth	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Perthshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Peterhead	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7	1/2
Renfrewshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Rothesay	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Roxburghshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
St. Andrews	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Selkirkshire	1/6	1/6	1/6	1/7	1/7	1/6	1/7	1/1
Stirling	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Stirlingshire, West	1/6	1/6	1/6	1/6	1/6	1/6	1/7	1/1
Stornoway	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
West Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 198.

NEW BUILDINGS IN SCOTLAND

Angus.—Houses.—The Angus C.C. approved a scheme for 70 new houses in various parts of the country.

Dumbarton.—Houses.—Dumbarton Town Council have agreed to acquire 2½ acres of ground for the purpose of erecting an additional 40 dwelling-houses.

Edinburgh.—Houses.—The Dean of Guild Court passed the following:—Hebburn Bros., 95, Shandwick-place—26 houses at Hillview-road, Corstorphine, and 24 houses at Hillview-crescent, Corstorphine. Lawrie Bros. (Ltd.), 16, Dixon-street, Glasgow—demolition and extend warehouse at 28, King's Stables-road.

Lanarkshire.—Houses.—The County Council are inviting tenders for the erection of 60 houses at Logan-street, Blantyre, and 50 houses at Cleland. Mr. P. C. Smith, County Housing and Town Planning Department, 13, Clydesdale-street, Hamilton, has prepared the plans.

Motherwell.—Extensions.—The Motherwell and Wishaw Dean of Guild Court has granted Messrs. John Stewart and Co. (Wishaw), Ltd., Coltness Coach Works, Kirk-road, Wishaw, permission to extend their premises.

Tranent.—Houses.—The Town Council are inviting tenders for the erection of 30 houses at Hungerage. Messrs. Morham and Brotchie, F.F.S., 29, Hanover-street, Edinburgh, have prepared the quantities.

FACILITIES FOR TELEPHONES IN BUILDINGS

The General Post Office, with the assistance of the R.I.B.A., has produced a work which should be of considerable value to the architect in planning.

The telephone requirements of a building necessitate the provision of conduits or channels carried in or upon the walls or in the floors. Such facilities, therefore, can be provided in the most satisfactory manner while the building is under construction, and they should be on a scale sufficiently adequate to permit of telephone connections being made at any points in the building without delay, and without the necessity of interfering with the fabric of the building. In these days of steel and concrete building construction, and especially in view of the steady growth of the telephone habit, it is necessary to plan for telephone service with the same forethought as is exercised to ensure that a building shall be furnished with a sufficiency of electric light points. The lack of systematic advance planning for telephones is already evident in buildings not many years old, where, in order to remedy the deficiency, it is found necessary to adopt methods that are expensive, inconvenient, and architecturally undesirable. The matter is therefore one of particular concern to owners of buildings. Whatever care may be exercised, it is impossible, after a building is finished, to carry out telephone wiring operations on a large scale without some damage to walls and floors, disfigurement of decorations, and inconvenience to tenants. And this may happen frequently in the same building. The extent to which these disadvantages can be avoided depends on the adequacy of the wiring arrangements incorporated in buildings during construction, and this publication gives methods, with full illustration by photographs, sections and plans, how adequacy can best be obtained in (a) business buildings, (b) hotels, (c) flats, and (d) dwelling houses. In our opinion a most valuable work of which architects, surveyors and engineers should take full advantage. Seventy-five pages, bound in board, the book is to be distributed to the profession, but any *bonâ-fide* person requiring a copy should make application to the secretary's office, St. Martin's-le-Grand, E.C.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	9	9
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	4
Do. to sides of excavation, including shoring	"	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	27	0
Add if in underpinning in short lengths	" "	6	0
Add if in floors 6 in. thick	" "	2	6
Add if in beams	" "	3	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	"	2	0

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	5	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	"	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork:—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement		0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks		4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarte -inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	0
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	"	1	0

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0
Chilmark stone fixed complete	" "	17	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	4	3	
Do. joists	" "	4	9	
Do. roofs, floors and partitions	" "	5	3	
Do. trusses	" "	7	9	

		½"	1"	1½"	2"
Deal rough close boarding	per sq.	33/6	38/-	43/-	70/-

Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	0	9
Centre for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		½"	1"	1½"	1½"
Deal-edges shot	per sq.	—	42/6	50/-	57/6
Do. tongued and grooved	"	—	47/-	56/-	64/-
Do. matchings	"	44/-	49/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights: average size	"	3	9

DOORS

		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/3	2/5
Four-panel Do.	"	2/4	2/6	2/9
Two-panel moulded both sides	"	2/6	2/9	2/11
Four-panel Do. Do.	"	2/9	2/11	3/2

CARPENTER AND JOINER—continued.

FRAMES.

				s.	d.
Deal wrot moulded and rebated	per foot cube			14	0
		1"	1¼"	1½"	
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11	
Deal shelves and bearers	"	1/4	1/6	1/9	
Add if cross-tongued	"	2d.	2d.	2d.	

STAIRCASES.

		1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8	—

Housings for steps and risers	each		0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run		0	9
Mahogany handrail average, 3 in. × 3 in.	" "		6	0
Add if ramped	" "		12	0
Add if wreathed	" "		24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and	
Casement stays	1/2	making good	19/-
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	15	3
Plain compound girders	"	18	0
Do. stanchions	"	20	9
In roofwork	"	26	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/4	1/7	1/9	2/-
Ogee Do. Do.	"	1/6	1/9	2/3	2/9
Rain-water pipes with ears	"	1/6	2/4	—	—
Extra for shoes and bends	each	3/4	4/11	—	—
Do. stopped ends	"	1/6	1/10	2/9	3/3
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	40	0
Do. Do. in flats	"	39	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/1	1/7	1/10	3/-	3/6	—
Do. service	"	1/6	2/-	2/5	3/6	—	—
Do. soil	"	—	—	—	—	—	6/-
Bends in lead pipe	each	—	—	—	—	3/-	6/6
Soldered stop ends	"	1/-	1/4	1/9	2/6	3/2	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/6	3/-	3/6	4/4	5/6	7/9
Lead traps and cleaning screws	"	—	—	—	12/7	17/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

			s.	d.
Render, float and set in lime and hair	per yard sup.		2	3
Do. Do. Sirapite	" "		2	6
Do. Do. Keen's	" "		3	6
Add saw lathing	" "		1	7
Add metal lathing	"		2	6
(Not including hangers or runners, etc. for suspended ceilings.)				
Portland cement screed	" "		2	2
Do. plain face	" "		3	3
Mouldings in plaster	per 1 girth		0	1½
One-and-a-half granolithic pavings	per yard sup.		5	3

GLAZIER.

21-oz. sheet plain	per foot sup.	0	7½
26-oz. Do.	" "	0	10
Obscured sheet	" "	1	1
¼-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10
¼-in. wired cast plate	" "	1	3

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

A New Branch.

The Standard Wallpaper Co., Ltd., inform us that they have acquired premises at 44, Uxbridge-road, Ealing, which, after reconstruction, will be opened as their Ealing branch, with trade counters and showrooms.

A Municipal Election.

We are informed that Mr. A. Goldstein, head of the well-known firm of glass merchants of Westminster Bridge-road, was elected a Councillor to the Lambeth Borough Council at the last election, and we offer him our congratulations on his entry into public life.

Expanded Metal for Concrete and Plaster.

The Expanded Metal Company, Ltd., issue from Burwood House, Caxton-street, S.W.1, a publication entitled "'Ribmet' for Concrete and Plasterwork," which draws attention to the merits of "Ribmet" mesh reinforcement for concreting and plasterwork. The standard type is composed of the company's "B.B." expanded metal lathing and V-shaped ribs; the latter is attached securely to the sheets, at frequent and regular intervals, with steel wire. These ribs can be spaced at practically any required dimensions, but 3 in., 4 in. and 5 in. are the standard centres. The ribs can be cambered or bent to any form or shape, and thus the uses to which "Ribmet" can be put for reinforcement purposes are clear. The publication is well illustrated, and contains full data and working drawings.

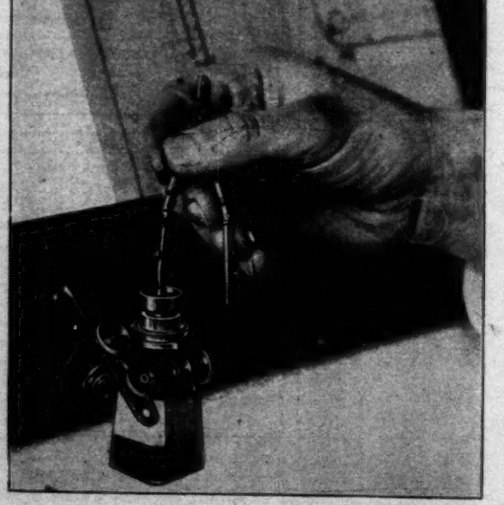
Erection of New Building, East Indies.

The Commercial Agent in the Netherland East Indies reports that plans have been prepared for the building of apartment flats at Bandoeng. The building will be constructed throughout of reinforced concrete and designed on European lines. The cost of the building is estimated at approximately £75,000. It is thought that United Kingdom firms interested in the supply of lifts, labour-saving devices, sanitary ware and building materials, might care to forward catalogues.

Firms desirous of offering goods of United Kingdom manufacture can obtain further details relating to this matter, together with particulars of the "Special Register" service of information, on application to the Department of Overseas Trade, 35, Old Queen-street, London, S.W.1. Reference number C.X.3794.

An Automatic Pen-filler.

An automatic device for filling drawing-pens and similar appliances with Indian ink has now appeared on the market. The "Touchfill" automatic ink filler, which is quite a novelty, eliminates all risk of spilling, etc., and pens may be filled with Indian ink with the greatest ease and cleanliness. The "Touchfill" automatic filler is a miniature pump, fitted with all the refinements that may contribute to its efficiency. It can be inserted in any ink-bottle, and is very easy to manipulate, as can be seen from the illustration herewith. The pen is placed on the plunger and nothing more is required than a gentle pressure and the ink flows into the pen. When the "universal" holder is employed, the ink-glass with the "Touchfill" can be fitted even to a vertical drawing-board where it will swing. Such a convenient position makes it possible to fill the pen with ease and without taking the left hand off the T-square. The ink-glass with the "Touchfill" can fall over or be placed upside down without any running out, while it is equally impossible for the ink to dry up. For further particulars our readers are referred to the sole distributor, Mr. John Seggern, 25, Harbury-road, Birmingham, who will be pleased to send full details on request.



The "Touchfill" Automatic Pen-filler.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* *Denotes accepted.*
† *Denotes provisionally accepted.*
‡ *Denotes recommended for acceptance.*
§ *Denotes accepted subject to modifications.*
¶ *Denotes accepted by H.M. Office of Works and H.M. War Office.*

Aberdeen.—Four houses at Hutchieson-terrace. Messrs. Tawse & Allan, architects, Bon Accord-square:—

*North of Scotland Housing Co., Ltd., Aberdeen.

Alwoodley.—Parochial hall, for vicar and wardens of the Parish Church. Messrs. Kirk & Tomlinson, F. & L.R.I.B.A., architects, 63, Albion-street, Leeds:—

*Wood & Co., Leeds.

Ambleside.—12 non-parlour type houses on the Blue Hill housing site, for the U.D.C. Mr. C. L. Gregson, surveyor:—

*Mayfield Building Co. (Morecambe), Ltd., Morecambe.

Bampton.—For (*a*) eight houses at Bampton, and (*b*) six houses at Shillingford, for the U.D.C.:—

(*a*) *W. Nott, Bampton £2,639
(*b*) *W. Nott, Bampton 1,979

Barnes.—Two cottages adjoining the Lonsdale-road recreation ground, for the U.D.C.:—

Folsham, Ltd. £1,300
*J. W. Wright (Builders), Ltd. 1,171

Barnsley.—Four houses at the junction of Colley-crescent and Birk-avenue, and six houses at Colley-crescent, for the C.B. Borough Engineer:—

*Direct Labour.

Barrow-in-Furness.—Stores in Dalton-road and Scott-street, for Messrs. Marks & Spencer, Ltd. Chiswell-street, E.C. Messrs. Norman Jones & Rigby, F. & L.R.I.B.A., architects, 27, Lord-street, Southport:—

*Bovis, Ltd., London, W.1.

Belfast.—Erection of hospital ward block, at Holywood, for H.M. War Office:—

*McDowell & Fitzsimons, Lurgan.

Beverley.—Extensions to Beverley dispensary and hospital, Wilbert-lane, for the Committee. Messrs. Whiteing & Reynolds, L.R.I.B.A., architects, 3, Ladygate:—

*Quibell & Son, Ltd., Hull.

Bexhill-on-Sea.—Several detached residences in Cooden-drive. Mr. J. E. Maynard, architect, Collington-avenue:—

*W. C. Greed, Collington-avenue, Bexhill.

Birmingham.—Buildings for the Society of Friends. Mr. Hubert Lidbetter, F.R.I.B.A., architect, Amberley House, Norfolk-street, Strand, London, W.C.2:—

*W. T. Nichols, Ltd., Gloucester.
(Estimated cost £20,000.)

Blackpool.—Rebuilding of "Fairyland," for the Board of Management. Mr. J. C. Derham, L.R.I.B.A., architect, Empress-chambers, Church-street:—

*Sir Lindsay Parkinson & Co., Ltd., Blackpool.

Blackpool.—Alterations and additions to works in Seiborne-road and Colleridge-road for Messrs. Waller & Hartley, Ltd. Mr. Halstead Best, F.R.I.B.A., architect, Leeds-buildings 20, Clifton-street:—

Builders—*Sir Lindsay Parkinson & Co., Ltd., Blackpool.
Steelwork—*John Booth & Sons, Bolton.
Bronze casements—*Russell, Edwards & Co., Bamber Bridge.
Steel casements—*Williams, Gamon & Co., Chester.
Reinforced floors—*Concrete, Ltd., Stourton, Leeds.
Lift—*Wm. Wadsworth & Sons, Bolton.

Blaydon-on-Tyne.—Rebuilding the "Bottle House Arms," for the Wilkinson's Brewery Co., Newcastle:—

*J. Jackson & Sons, Corporation-street, Newcastle.

Bolton.—Detention house and matron's house in Queen-street, for the P.A.C. Messrs. Bradshaw Gass & Hope, FF.R.I.B.A., architects, 19, Silverwell-street:—

*R. Mosley, Bolton.

Brampton.—Structural alterations to the Cottage Hospital, for the Council:—

*Warwick & Sons.

Bromsgrove.—Alterations, etc., at "Fair View," Ednall-lane, and erection of a new mortuary in hospital grounds at Bromsgrove Cottage Hospital, for Board of Management. Mr. G. C. Gadd, architect, Town Hall-chambers:—

*Fred Lacey, Bromsgrove.

Bungay.—Two houses in Wharton-street, for the U.D.C.:—

*G. H. Hipperson & Sons, Beccles £707

Burslem.—Branch stores on Landon and Gravelly Bank at Longton, for the Burslem and District Industrial Co-operative Society, Ltd., 10, Newcastle-street, Burslem. Messrs. Watkin & Maddox, L. and A.R.I.B.A., architects, National Provivncial Bank-chambers, Burslem, Stoke-on-Trent:—

*T. H. Hand, High-lane, Tunstall, Stoke-on-Trent.

Buxton.—Electric lighting installation at the 40 houses on the Fairfield housing site, for the Corporation:—

*F. Bainbridge, Manchester.

Camberley.—For the erection of the cinema, "The Capitol," Frimley-road, Camberley, for The Capitol (Camberley), Ltd. Mr. Maurice B. Lawson, architect, Lloyds Bank-chambers, Camberley. Quantities by Mr. D. R. Nolans, P.A.S.I., 30, John-street, Bedford-row, W.C.1:—

Building—

Holland & Hannen and Cubitts, London	£19,933
Caesar Bros., Aldershot	19,588
Tribe & Robinson, Guildford	19,560
Hughes & Co., Wokingham	18,967
Sabey & Son, Islington	18,950
Corben & Sons, Maidstone	18,715
G. H. Hoskins, Camberley	18,147
*Pitcher Construction Co., London	17.850
David Fry & Son, Godalming	17,763

Steelwork—

*Powers & Deane Ransomes, London.

Castleford.—Pumping station, etc., at Ings-lane, for the U.D.C. Messrs. W. G. & R. W. Weekes, engineers, 75, Victoria-street, Westminster, S.W.1:—

*J. R. Rodgers & Sons, Ltd., Castleford £27,717

Chippenham.—72 houses at Woodlands-road, for the T.C.:—

F. T. Ranger, Chipping Sodbury	£28,749 18
Tydeman Bros., Swindon	28,700 0
Copp Bros., Bath	27,325 17
C. Syms & Sons, Calne, Chippenham	26,900 0
Downing & Rudman, Chippenham	26,470 0
W. E. Chivers & Sons, Devizes	25,900 0
Bigwood & Son, Melksham	25,594 15
Building and Public Works Construction Co., Swindon	24,595 1
A. E. Guest, London	24,429 12
*King & Co., Newport, Mon.	22,759 0

Consett.—Ambulance rooms and garage, for the Consett branch of the St. John Ambulance. Messrs. Murray & Hurd, architects:—

*Robert Gallacher, Ltd., Blackhill.

Coventry.—Church of St. Barnabas, for Vicar, Rev. C. V. B. Robinson, and Church Wardens of St. Mark's Church. Messrs. Austin & Paley, A.R.I.B.A., architects, 24, Castle-park, Lancaster:—

*E. Harris & Son, Coventry.

Dagenham.—Wrought-iron fencing at Reede-road, for the U.D.C. Mr. T. P. Francis, surveyor:—

*W. A. Baker & Co., Ltd., Newport, Mon.

Dorchester.—20 (three-bedroom) non-parlour type houses at Victoria-park, for the T.C. Mr. Harman Daniel Strange, Borough Architect and Surveyor:—

*D. Nott, Chaul End-lane, Caddington, near Luton, Beds £5,975

Dorchester.—For (*a*) 12 houses at Charminster and (*b*) two at Tolpuddle, for the R.D.C.:—

(*a*) *S. J. Hawkins, Moordown, Bournemouth £4,285 3 0
(*b*) *S. J. Hawkins, Moordown, Bournemouth 735 6 6

Ealing.—3 houses, on the Bramley-road site, for the T.C.:—

*Cain & Co. £1,114 10

East Riding.—Farmhouse and foundations, etc., to farm buildings at West Huntow Farm, off Scarborough-road, Bridlington, for the Small Holdings and Allotments Sub-Committee. Mr. T. Tate, land agent, East Riding C.C., County Hall, Beverley:—

*J. Sawden, St. John's-avenue, Bridlington.

Edinburgh.—26 houses, at Hillview-road, Corstorphine:—

*Hepburn Brothers, Craiglochart-road, Corstorphine, Edinburgh.

Edinburgh.—4 bungalows, at Craiglochart-road, Corstorphine. Messrs. Chas. E. Tweedie & Son, architects, 54, Frederick-street:—

*Charles McKendrick, 2, Charlotte-square, Edinburgh.

Edinburgh.—Demolition of buildings, reconstruction of existing buildings, and erection of new buildings to form new primary school and new technical department at George Heriot's school, Lauriston-place, for the George Heriot's Trust. Messrs. Reid & Forbes, architects, 17, Great Stuart-street. Quantities by Messrs. Reid and Gibson, 17, Great Stuart-street:—

Mason—	
*Colin MacAndrew	£19,998
Joiner—	
*Colin MacAndrew	8,228
Plumber—	
*A. Haggart	2,200
Plasterer—	
*James Cramb	1,111
Slater—	
*Peter Kelley & Sons	568
Electrical—	
*Mackenzie & Moncur, Ltd.	1,541
Heating—	
*James Combe & Sons, Ltd., Glasgow (old building)	1,961 268
Terrazzo—	
*Toffolo, Jackson & Co., Ltd.	862
Steelwork—	
*Redpath, Brown & Co., Ltd.	2,940
Glazier—	
*Dickson & Walker	291

(Remainder of Edinburgh.)

Edinburgh.—Installation of electric lighting in men's hostel and janitor's house, 2-14, Cowgate, for the T.C.:—

*Malcolm & Allan, Ltd., 17, North St. Andrew-street.

Ellesmere Port.—New premises at Overpool for branch stores, for Ellesmere Port and District Co-operative Society, Ltd., 60, Church-street. Architects' Department, Co-operative Wholesale Society, Ltd., Balloon-street, Manchester:—

*E. B. J. Gould, Ellesmere Port.

Giffnock.—3 houses, Hathaway-drive, Stratton-drive, and Berryhill-drive:—

*Thomas Stewart, Ltd., 24, Lochleven-road, Langside, Glasgow.

Glasgow.—Shed and workshops, etc., at Abbotts Inch, for H.M. Air Ministry:—

*Glasgow Steel Roofing Co., Ltd., Possilpark, Glasgow.

Glasgow.—Alterations at Millets Stores, Union-street. Messrs. Miller & Black, architects, 132, West Regent-street:—

*Morris & Spottiswood, 151, Langside-road, Queen's-park, Glasgow.

Glasgow.—Twenty-three lock-up garages at Castlemilk-road, Cathcart:—

*MacTaggart & Nickel, Ltd., 65, Bath-street, Glasgow.

Golborne.—Sewage disposal works at Golborne, for the U.D.C. Messrs. C. J. Lomax & Son, chartered civil engineer, 37, Cross-street, Manchester:—

*Leonard Fairclough, Ltd., Adlington.

Hampton-on-Thames.—New house, for Messrs. Makins & Badcock:—

*W. H. Gaze & Sons, Ltd., 19, High-street, Kingston-on-Thames.

Hednesford.—Pit-head baths at Cannock Wood Colliery, near Hednesford, for the Miners' Welfare Committee. Mr. J. H. Forshaw, A.R.I.B.A., architect, Mines Section, Dean Stanley-street, Millbank, London, S.W.1:—

*W. Walkerdine, Ltd., Derby.

Hinckley.—20 non-parlour houses on the Gravel Pit Farm estate, Barwell, for the R.D.C. Mr. T. Flavell, clerk:—

*T. G. Lee, Stoke Golding, Nuneaton £5,983 6 8

Holbeach.—10 pairs of houses on Battlefields-lane site, for the U.D.C. Mr. W. St. Leger Crowley, architect, 32, Hall-street, Spalding:—

*G. A. Campion, Peterborough £3,400

Horwich.—Extensions to St. Catherine's Church, for Vicar, Rev. J. G. Humphries, and Church Wardens, Mr. Frank Freeman, L.R.I.B.A., architect, 21, Wood-street, Bolton:—

*W. Makinson & Sons, Horwich.
(Estimated cost: £5,600.)

Huntly.—2 blocks of 4 3-apartment flatted houses at Bleachfield-street, for the T.C. Mr. Thos. S. Hutson, Burgh Surveyor, 5, Duke-street. Quantities by the Burgh Surveyor:—

Mason—	
*Wm. Drummond & Son, Huntly	£426 9 0
Carpenter—	
*Jas. M'Kay & Son, Huntly	309 19 0
Slater—	
*Chas. Dickie & Sons, Surriff	59 9 6
Plumber—	
*H. W. Gray, Huntly	122 3 9
Plasterer—	
*Alex. Munro, Huntly	110 18 8
Painter—	
*R. Mitchell & Son, Huntly	30 8 8
Drainage—	
*Wm. Drummond & Son, Huntly	23 12 0
Fencing—	
*Jas. M'Kay & Son, Huntly	35 15 0
Grates—	
*Watt Bros., Huntly	31 2 0

Ilkeston.—Two non-parlour type houses in Chapel-street, for the T.C.:—

*J. W. Stapleton & Sons, Ltd., Ilkeston £732

Inverurie.—Four houses in North-street, for the T.C.:—

Mason work—	
*G. Duncan & Sons, Inverurie	£609 15 0
Joiner work—	
*J. Craig, Kintore	281 8 3
Plumber work—	
*J. Laing & Son, Inverurie	162 10 0
Plaster work—	
*R. Murdoch, Inverurie	115 10 7
Painter work—	
*W. Ross, Inverurie	36 0 0
Slater work—	
*W. Rhind, Inverurie	69 10 6

Kettering.—Offices and garage in Wicksteed Park, for the Wicksteed Village Trust, Ltd.:—

*J. C. Neal, Ltd., Kettering.

Kingsthorpe.—Church hall, classrooms, etc., at High-street, for the Trustees of the Kingsthorpe Baptist Church:—

*A. L. & H. W. Chowns, Northampton.

Kingswood.—44 non-parlour type houses on the Cheltenham-road housing site, for the U.D.C. Mr. G. Fletcher, surveyor:—

	With geyser system.	*With hot water system.*
‡J. Gunning & Son, Warmley	£13,168 ...	£13,388
G. H. Porter, Horfield	14,130 ...	13,800
H. Williams, Warmsley	13,756 ...	—
H. & J. Lemon, Westerleigh	— ...	15,068
H. T. Cane, Bristol	— ...	14,476
Bennett & Morgan, Fishponds	14,620 ...	14,908
British Builders, Ltd., Bristol	13,220 ...	13,872
H. Ayres & Son, Kingswood	— ...	14,188
W. J. Hembrough & Son, Ltd., Warmley	14,248 ...	14,512
(Alternative price for 44 houses, £14,160.)		
H. C. & W. Bracey, Downend	— ...	14,248
F. A. Lusty, Bristol	15,510 ...	15,576
Willmott Bros., Kingswood (tendered for Sec. 3 only)	6,260 ...	6,360
J. H. Davies, Cardiff	— ...	15,704

Lancaster.—Electrical installation at the new public library, for the Corporation. Town Clerk:—

*W. H. Inman, North-road, Lancaster.

Leeds.—Alterations and additions to drapery stores in King Edward-street, for Messrs. Stephensons, Ltd.:—

*Wm. Irwin & Co., Ltd.

Leeds.—First portion of the new store in The Headrow, for Messrs. Lewis, of Liverpool:—

*William Airey & Sons, Leeds.

¶London.—Tenders accepted by H.M.O.W. for the week ending January 14:—

Kew Gardens, Refreshment Pavilion—alterations—A. Roberts & Co., Ltd., 74, Earl's Court-road, W.8.
Euston Telephone Exchange—erection—Hall, Bedall & Co., Ltd., Pitfield Wharf, Waterloo Bridge, S.E.1.
Bucknalls, Watford, Research Station—wiring—Keeble, Ltd., 10, Carlisle-street, W.1.
Great Portland-street, W., Post Office—alterations—Soole & Son, Ltd., Richmond.
Edinburgh, Royal Scottish Museum—stone finishings—Toffolo, Jackson & Co., 110, W. Regent-street, Glasgow.
Pontypool—maintenance work—A. J. Pegington, "Hillside," Channel View, Penggara, Pontypool.
Leeds Head Post Office—hot water service—W. Freer, Ltd., 36, Wellington-street, Leicester.
Watford Post Office—erection—Welwyn Builders, Ltd., Bridge-road, Welwyn Garden City.
Plaistow, E., "Plashet" Telephone Exchange—heating—Fretwell Heating Co., 36, Crescent-road, E.13.
Edinburgh, Boroughmuirhead Post Office—alterations—G. & R. Cousin, 24, Hill-street, Edinburgh.
Post Office fittings—O. C. Hawkes, Ltd., Bromsgrove-street, Birmingham.
Uxbridge—maintenance work—H. Wilson (Uxbridge), Ltd., 2, Lancaster-road, Uxbridge.
Greenwich Post Office—alterations—Thomas & Edge, Ltd., 4, Eton-road, S.E.18.

¶London.—Tenders accepted by H.M. Air Ministry for the week ending January 9:—

Duxford—artificer's work—W. Laughton, Midland-road, Bedford.
Filton—artificer's work—F. H. Biddiscombe, 11, Wingfield-road, Trowbridge.
Abingdon—elevated water tank—Christiani & Nielsen, 72, Victoria-street, S.W.1.
Thornaby-on-Tees—heating installations—Brightside & Foundry Eng. Co., Ltd., 17, Sumner-row, Birmingham.

London.—Decorations and repairs at the second-floor flat at Great Smith-street Library, for the Westminster City Council:—

Army & Navy Co-operative Society, Ltd.	£208 5 6
A. Bull	216 0 0
Wilton Decorators, Ltd.	203 5 0
F. Cope & Co., Ltd.	197 10 0
F. C. Hoskins & Co., Ltd.	181 5 0
*Sims & Russell	166 0 0

London.—Redecorating interior of first-class swimming bath at Great Smith-street baths, for the Westminster City Council:—

Army & Navy Co-operative Society, Ltd.	£639 10 0
F. Cope & Co., Ltd.	627 17 6
F. C. Hoskins & Co., Ltd.	590 16 0
Sims & Russell	553 0 0
Wilton Decorators, Ltd.	547 6 4
* John Garlick (1910), Ltd.	497 5 0

London.—Heating of first-class swimming bath, at Great Smith-street establishment, for the Westminster City Council:—

J. Montner-Smith, Gray & Co., Ltd.	£204 0
S. Mulliner, Ltd.	159 10
Rosser & Russell, Ltd.	144 10
Air Vent Heater Co., Ltd.	139 12
*Central Heating Co.	128 10

London.—Re-tiling of first-class swimming bath and other works at Buckingham Palace-road establishment, for the Westminster City Council:—

Army & Navy Co-operative Society, Ltd.	£2,097
Griggs & Son, Ltd.	1,987
H. Knight & Son	1,971
John Garlick (1910), Ltd.	1,883
F. C. Hoskins & Co., Ltd.	1,869
*Sims & Russell	1,822

London.—Parcels receiving depot at Bishops-road, Paddington, W.2, for the G.W.R. Chief Engineer, Paddington Station, W.2:—

*Wilson, Lovatt & Sons, Ltd., 569, Abbey House, Victoria-street, S.W.1.

Loughborough.—Alterations to the model lodging house premises, The Rushes, for the T.C.:—

Marriott & Sons	£1,530 0 0
L. Hopkins	1,518 0 0
J. L. Ford	1,428 14 9
Wm. Moss & Sons, Ltd.	1,348 0 0
H. Hammond & Son	1,315 10 3
A. Faulks	1,285 0 0
T. Barker & Sons	1,285 0 0
*W. Corah & Sons, Ltd.	1,275 0 0

Macclesfield.—Water tower at Wardle-crescent, Cross-lane, Gawsworth, for the R.D.C. Mr. J. H. Walters, engineer, Moody-chambers, Congleton:—

*G. Roylance & Co., Ltd. £277

Manchester.—Alterations and additions to the "Royal George Hotel," Lever-street, Friday-street and Stephenson-place, for Messrs. Walker & Homfray, Ltd., Woodside Brewery, Eccles New-road, Salford. Mr. F. Riley, L.R.I.B.A., architect, of Messrs. Brameld & Smith, 4, Cannon-street:—

*E. J. Coupe & Sons, Ltd., Salford.

Manchester.—Additional weaving shed to Mill, Moston-lane, Moston, for the Chain Bar Mill Co., Ltd., 56, Newton-street:—

*J. Partington, Ltd., Middleton Junction, near Manchester.

Mansfield.—Additions to Constitutional Club, Mid-worth-street, for the Mansfield Conservative Association and Mansfield Constitutional Club, Ltd., Church-lane. Mr. Aubrey Lane, L.R.I.B.A., architect, Leeming-chambers, Leeming-street:—

*A. Mason, Mansfield.

Middlesbrough.—12 cottages for aged persons, on the Whinney Banks estate, for the T.C.:—

*Ball & Thomas, 12, Bramkingham-terrace, Norton-on-Tees £2,163 3

Newcastle-on-Tyne.—Concrete platforms at the omnibus station at the Haymarket, for the City Council. Mr. F. H. Holford, City Property Surveyor:—

*A. Anderson, Sutton-street, Walkergate.

Newcastle-on-Tyne.—Extensions at the "Market-lane Hotel," for Sir John Fitzgerald. Mr. J. Walton Taylor, architect, St. John-street:—

*John Jackson & Sons, Ltd., Corporation-street, Newcastle.

Newcastle-on-Tyne.—Extensions to the baths and washhouses at Byker, for the T.C.:—

*Elliott Brothers, Otterburn-terrace, Jesmond, Newcastle.
Engineering work—*Rowell's, Ltd., Byron-street, Newcastle.

Northwich.—Alterations and extension of Winnington sewage disposal works, for the U.D.C. Mr. W. M. Beckett, engineer, Victoria Station House, London, S.W.1:—

*S. Hutton & Co., Ltd., Northwich.
(Estimated cost £17,235.)

Nottingham.—New warehouse and administrative block, for Messrs. Wm. Hollins & Co., Ltd., of Castle-boulevard:—
*Gilbert & Hall, Ltd., Castle-boulevard, Nottingham.

Oxford.—Fencing of the South Park estate, for the T.C. City Engineer:—
*Hinkins & Frewin, Ltd. £288

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Oxford.—New works at Swinford, for the T.C.:—
*Edwards Construction Co., Ltd., 10 and 13, Bedford-street, Strand, W.C.2 ..... £35,051 7 6

Penmaenmawr.—Reinforced concrete chalet on the Promenade, for the U.D.C. Mr. J. Parry Hughes, surveyor:—
*Norwest Construction Co., Ltd., Litherland, Liverpool.

Penrith.—Filter house, tanks chambers and other works within the parishes of Matterdale, Berrier, Greystoke and Penrith, for the R.D.C. Mr. John J. Davison, engineer, King-street, Wigton:—
*P. A. Baines & Sons (Northern), Ltd., Kendal £3,221

Preston.—Stands, etc., at the new Greyhound Racing Track in Acregate-lane, for the Preston Greyhound Association. Mr. H. Heaton, architect, 9a, Queen's-buildings, Fishergate:—
*T. Blackburn & Sons, Ltd., Preston.

Preston.—Lavatory accommodation at Grammar school playing fields, for the T.C. Mr. W. Platt, Borough Engineer:—
*R. M. Barton, Broughton, near Preston.

Richmond (Yorks).—Café and shop premises at High-row, for Mr. C. W. Jackson. Messrs. Wetherell & Dent, F.L.R.I.B.A., architects, High Town-chambers:—
*T. Boyd, Darlington.

Rushden.—12 houses, for the U.D.C.:—
*R. Marriott, Rushden £4,407

Smethwick.—Extensions to "Boatman" Inn, Great Arthur-street, for Mr. Hubert R. Twist, 9, Union-street, Birmingham. Mr. G. Randle, architect, 116, High-street:—
*W. Jackson, Ltd., Birmingham.

Stockton-on-Tees.—Omnibus garage in Boathouse-lane, for the T.C. Mr. J. P. Wakeford, Borough Engineer:—
*L. Brown & Sons, Boathouse-lane, Stockton.
Steelwork—*Furness Shipbuilding Co., Ltd., Haverton-on-Tees.

Tadcaster.—Reconstruction of brewery buildings at the Old Brewery, for Messrs. Sam Smiths, Ltd.:—
*F. Shepherd & Son, Ltd.

Truro.—Fifty houses, for the T.C.:—
*T. B. Randell, Truro £18,425

Wallasey.—Health and school clinic and maternity and child welfare centre, Moreton, for the T.C.:—
*W. Bradshaw £2,906

Wallasey.—Buildings in connection with the proposed open-air bath, Wallasey Beach, for the T.C.:—
*Joseph Dolan & Son, Warrington... £12,383

Wallsend.—For (a) 30 houses in flats (60 flats) on the Archer-street rehousing estate, and (b) 4 houses in flats (8 flats), Albert-street, Howdon, for the T.C. Borough Surveyor, Town Hall, Wallsend:—
*R. Barron & Co., Ltd., Coundon, Co. Durham £15,686

Warsop.—20 non-parlour type houses and eight blocks of flats for aged people, for the U.D.C.:—
*Adam Eastwood & Sons, Warsop £9,324

York.—Showrooms, etc., on Davygate, for Messrs. Myers & Burnell. Messrs. Biscombe & Ferrey, architects, New-street-chambers, 7, New-street:—
*L. Bell, York.
Steelwork—
*E. Bidgood, Ltd.

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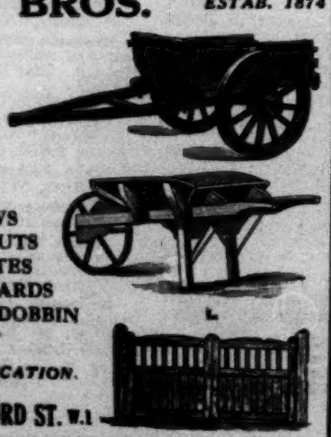
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